COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION

CASE NO. 2009-00549

APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF BASE RATES

DIRECT TESTIMONY OF DENNIS W. GOINS ON BEHALF OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

April 22, 2010

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INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Dennis W. Goins. I operate Potomac Management Group, an economics and management consulting firm. My business address is 5801 Westchester Street, Alexandria, Virginia 22310.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a Ph.D. degree in economics and a Master of Economics degree from North Carolina State University. I also earned a B.A. degree with honors in economics from Wake Forest University. Following graduate school I worked as a staff economist at the North Carolina Utilities Commission (NCUC). During my tenure at the NCUC, I testified in numerous cases involving electric, gas, and telephone utilities on such issues as cost of service, rate design, intercorporate transactions, and load

forecasting. While at the NCUC, I also served as a member of the Ratemaking Task Force in the national Electric Utility Rate Design Study sponsored by the Electric Power Research Institute (EPRI) and the National Association of Regulatory Utility Commissioners (NARUC).

For the past 32 years I have worked as an economic and management consultant to firms and organizations in the private and public sectors. My assignments focus primarily on market structure, policy, planning, and pricing issues involving firms that operate in energy markets. For example, I have conducted detailed analyses of product pricing, cost of service, rate design, and interutility planning, operations, and pricing; prepared analyses related to utility mergers, transmission access and pricing, and the emergence of competitive markets; evaluated and developed regulatory incentive mechanisms applicable to utility operations; and assisted clients in analyzing and negotiating interchange agreements and power and fuel supply contracts. I have also assisted clients on electric power market restructuring issues in Arkansas, New Jersey, New York, South Carolina, Texas, and Virginia.

I have submitted testimony and affidavits and provided technical assistance in more than 100 proceedings before state and federal agencies as an expert in competitive market issues, regulatory policy, utility planning and operating practices, cost of service, and rate design. These agencies include the Federal Energy Regulatory Commission (FERC), the Government Accountability Office, the First Judicial District Court of Montana, the Circuit Court of Kanawha County, West Virginia, and regulatory agencies in Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, New Jersey, New York, North Carolina, Ohio, Oklahoma, South Carolina, Texas, Utah, Vermont, Virginia, West Virginia, and the District of Columbia. Additional details

of my educational and professional background are presented in the Appendix.

Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A. I am appearing on behalf of the Kentucky Industrial Utility Customers, Inc. (KIUC). Two of the KIUC members are served under curtailable service Rider CSR1 by Louisville Gas and Electric Company (LG&E).

Q. WHAT ASSIGNMENT WERE YOU GIVEN WHEN YOU WERE RETAINED?

A. I was asked to undertake two primary tasks:

1. Review LG&E's proposed revisions to its curtailable/interruptible service.[1]
2. Identify any major deficiencies in LG&E's curtailable service rate proposals, and recommend necessary changes.

Q. WHAT INFORMATION DID YOU REVIEW IN CONDUCTING YOUR EVALUATION?

A. I reviewed LG&E's filing, testimony, exhibits, and responses to requests for information.[2] I also reviewed testimony and Commission orders in prior LG&E rate and integrated resource planning (IRP) cases. Finally, I reviewed information found on web sites operated by LG&E's parent company, E.ON U.S., FERC, and the Commission.

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[1] LG&E uses *curtailable* in designating its current and proposed rate options for nonfirm service for large commercial and industrial customers. Curtailable or interruptible load is generally associated with a customer's agreement either to reduce load to zero or no more than the customer's firm contract demand, or to provide a contractually stated reduction in demand when requested by the host utility. In my testimony, I use the terms *curtailable* and *interruptible* interchangeably except when referring to specific LG&E nonfirm rate options that are designated *curtailable*.

[2] I have included selected relevant responses related to LG&E's curtailable rates in Exhibit DWG-1.

CONCLUSIONS

Q. WHAT CONCLUSIONS HAVE YOU REACHED?

A. On the basis of my review and evaluation, I have concluded the following:

1. LG&E currently offers three curtailable rate options—Riders CSR1, CSR2, and CSR3—under which customers receive an administratively set credit for their curtailable load measured during specified periods.[3] These riders are differentiated by the length of notice a customer receives before a curtailment begins, maximum annual hours of curtailment permitted, types of curtailment (physical or economic buy-through),[4] and level of the interruptible demand charge credit.
2. In this case, LG&E has proposed replacing Riders CSR1, CSR2, and CSR3 with Rider CSR—a major change that LG&E did not review in advance with current interruptible customers. Rider CSR retains the credit in Rider CSR1, increases the hours of curtailment under each existing rider, more than doubles the hours of curtailment under Riders CSR1 and CSR3—the only curtailable riders with customers, and subjects customers to both physical and economic buy-through curtailments. Rider CSR also changes the way a customer's monthly curtailable demand is calculated, and modifies how buy-through energy is priced, moving from a market-based pricing approach to a formula rate linked to a fixed heat rate and a daily natural gas price index.
3. LG&E's proposed Rider CSR curtailable credits and total hours of curtailments are inconsistent with provisions in the current

[3] LG&E's affiliated operating company—Kentucky Utilities Company (KU)—offers the same three curtailable rate options.

[4] During a physical curtailment, a customer does not have the option to buy curtailable energy during the curtailment at a market- or formula-based price. In contrast, a rider with a buy-through option allows a customer either to buy curtailable energy during the curtailment at a market- or formula-based price, or to reduce load to or below the customer's firm contract demand.

curtailable riders. Consider existing Rider CSR2—which has the highest current curtailable credit and requires customers to accept the highest number of curtailable hours (425). LG&E wants to increase curtailable hours under Rider CSR to 500 hours annually, yet pay a smaller credit than customers can currently get under Rider CSR2. Similarly, LG&E now wants to subject CSR1 customers to 300 additional hours of curtailment—at least 100 hours of which may be physical curtailment with no buy-through—while paying them the same CSR1 credit they receive now.

4. LG&E's proposed Rider CSR is an attempt to make one size curtailable service that fits all customers. Most effective interruptible rate programs with which I am familiar not only try to maximize the capacity savings and reliability enhancements from interruptible load, but also attempt to encourage customer participation by designing options that recognize customers' operating and safety concerns. For example, some Rider CRS1 customers that have tailored their operations to comply with 20-minutes notice curtailments may be unable to interrupt with only 10-minutes notice. LG&E's proposed Rider CSR ignores this potential customer constraint, and could result in valuable interruptible load leaving LG&E's system.

RECOMMENDATIONS

Q. WHAT DO YOU RECOMMEND ON THE BASIS OF THESE CONCLUSIONS?

A. I recommend that the Commission:

1. Reject LG&E's proposal to replace Riders CSR1, CSR2, and CSR3 with Rider CSR. The proposed rider is too restrictive, provides under-stated curtailable credits, is unlikely to attract new

customers, and could result in current interruptible load leaving the LG&E system.

2. Consolidate LG&E's current curtailable rate options into two new riders with minimum curtailment notices set at 10-minutes (Rider CSR10) and 30 minutes (Rider CSR30). These new options incorporate several elements from LG&E's proposed Rider CSR. However, unlike Rider CSR, Riders CSR10 and CSR30 customers, but also increase the curtailable credits they receive. I discuss Riders CSR10 and CSR30 in detail later in my testimony. However, key elements of the proposed riders should be noted. Specifically, they:

   - Increase maximum curtailment hours (relative to current riders) to 350 hours, of which 100 hours may be physical curtailment and 250 hours may be buy-through curtailment. In contrast, the current Rider CSR1 has a maximum of 200 hours of curtailment with no physical curtailment,[5] while Rider CSR3 has a maximum of 100 hours of physical curtailment with no buy-through.
   - Increase credits to $5.40-$5.50 per kW-month for CSR10 customers and $5.20-$5.30 per kW-month for CSR30 customers.
   - Require LG&E to give a good faith estimate of a curtailment's estimated duration when LG&E issues a curtailment notice.
   - Eliminate take-or-pay billing for buy-through energy blocks, and instead charge customers only for buy-through energy they actually use during a buy-through curtailment.

[5] Although Riders CSR1 and CSR2 have buy-through options, customers have no guarantee that buy-through energy will be available during a curtailment. If market-based buy-through energy is not available to supply a customer's curtailable load, then the customer must reduce load to firm contract demand or pay a noncompliance penalty for load in excess of firm demand. In effect, if buy-through energy is not available, a buy-through curtailment becomes a physical curtailment.

- Allow a customer to avoid noncompliance penalties if the customer agrees to install, pay for, and cede to LG&E control of equipment necessary for LG&E to disconnect (curtail) all of the customer's load in excess of firm contract demand during a curtailment. This process would effectively give LG&E a switch to isolate and disconnect a customer's nonfirm load during curtailments.

BACKGROUND

Q. WHAT IS INTERRUPTIBLE SERVICE?

A. Interruptible or curtailable service is a separately identifiable nonfirm utility product that allows a supplier to interrupt or curtail customer loads when reliability to firm service customers is impaired or endangered. In general, interruptible load enables a supplier to maximize the value of existing capacity resources and to avoid acquiring new capacity resources. In addition, utilities can also use interruptible load, if permitted, to enable high-value off-system sales or to mitigate high incremental fuel costs borne by firm service customers.

On a daily basis, utilities serve interruptible loads using available generating resources that are not required to serve firm load. That is, the available supply of interruptible service depends on the relationship between available power supply resources and firm service demands at a point in time. If firm demands command all available power supply resources in a particular hour, the supply of interruptible service falls to zero—that is, interruptible loads are interrupted. When firm demands are less than available resources, interruptible service is available.

Q. ARE INTERRUPTIBLE SERVICE AND RATE OPTIONS COMMON IN THE ELECTRIC UTILITY INDUSTRY?

A. Yes. Interruptible service is and has been a common service offered by most electric utilities. Federal legislation passed in 1978 (PURPA) recognized the value of interruptible rates and required state regulatory commissions to consider adopting them. Current federal policy continues to support such rates and other demand response mechanisms. A 2006 report by the Brattle Group on behalf of the Edison Electric Institute described interruptible service as follows:

> Utilities traditionally have offered large commercial and industrial customers such credits through interruptible service tariffs. Under such tariffs, customers typically receive a credit in return for agreeing to curtail all or a significant portion of their load up to several times a year, at times when the utility has a system operating emergency or when incremental generating costs are very high. Although enrollment in these programs usually is voluntary, the participant can face significant financial penalties if it fails to reduce demand when directed to do so, such as paying the spot market price for electricity consumed during a requested interruption period. Curtailable demand provides the utility or system operator with another resource to maintain system stability when resources are tight and also can reduce a utility's installed capacity obligations.[6]

Q. DO INTERRUPTIBLE LOADS PROVIDE TANGIBLE CAPACITY, OPERATING, AND ECONOMIC BENEFITS?

A. Yes. Interruptible load can and should be a significant element of any electric utility's demand-response efforts. Interruptible load has long been recognized as a means to avoid the cost of adding generating and transmission capacity. It provides operating reliability benefits by substituting, in certain cases, for such ancillary services as spinning and operating reserves. Interruptible load expands the range of resources

[6] Frank Graves, et. al., *PURPA: Making the Sequel Better than the Original* (EEI, December 2006) at 35.

available to meet contingencies, lowers customer costs, and can even be used to mitigate wholesale price volatility and curb potential market power problems. Interruptible service is also a form of insurance or safety net, protecting against emergency situations if and when they occur. In addition, interruptible load can create environmental benefits by avoiding the impacts of constructing and operating fossil generation.

As I noted, interruptible load can be used in wholesale markets to reduce prices and price volatility. For example, market-clearing prices fell by $100-$200/MWh on a peak day in August 2006 in the Midwest ISO when interruptible load was used in response to a call for demand reductions.[7] Similarly, LG&E's current Riders CSR1 and CSR2[8] allow economic interruptions with a buy-through option when called by LG&E. These economic curtailments reduce the need to purchase power at elevated prices, thereby reducing supply costs for the utility and its customers. Interruptible customers typically are allowed to buy through economic interruptions—but only at higher formula- or market-based prices that exceed base rate prices, transferring the risk of high prices from all consumers to the interruptible customer. By reducing demand during high-cost periods, economic curtailments mitigate conditions that produce price spikes.

Interruptible load also helps states to promote economic development and manufacturing jobs retention. The availability of an effective interruptible service option is often a key factor in determining where a manufacturing facility is located, particularly if the manufacturing process is energy intensive. In addition, the continuing long-term availability of a

[7] Federal Energy Regulatory Commission Staff Report, *2007Assessment of Demand Response and Advanced Metering* at 6-7 (September 2007).

[8] The buy-through option is available to a CSR2 customer only if the customer has been served under Rider CSR2 for three years with no noncompliance penalties for failure to comply with a curtailment request.

cost-effective interruptible rate option can help keep established firms competitive and growing.

Q. IN YOUR OPINION, WHY DO LARGE MANUFACTURING FIRMS GENERALLY TAKE INTERRUPTIBLE SERVICE?

A. Firms with flexible manufacturing processes involving electricity-intensive equipment—for example, kilns and arc furnaces—often find it economically essential to use nonfirm electric service to control production costs and maintain or improve their competitive position in national and global markets. Such firms neither want nor need firm service to manufacture their products. Instead, they need reasonable and fairly priced interruptible rate options that provide mutual benefits to them, their host utility, and firm service customers.

Q. HOW SHOULD INTERRUPTIBLE SERVICE BE PRICED?

A. Interruptible service should be priced to reflect the supplier's reduced cost of providing interruptible service—often though firm service credits or discounts that reflect avoided cost savings and reduced costs of service. For example, the EEI report I noted earlier states:

> At a high level, one first needs to determine the types of costs that a utility could avoid as a result of customer demand reductions. Peak load reductions enable a utility to avoid serving a portion of its load at times when marginal energy prices are high, so they clearly enable the utility to avoid energy costs (i.e., fuel and other variable production costs). Moreover, peak load reductions that a utility can count on in a planning sense could enable a utility to avoid building or purchasing peak generating capacity, which suggests that the credits could reflect the capacity cost of peaking units, such as combustion turbines. Interruptible customers do not enable a utility to avoid the sunk costs of any existing peaking units; they only potentially enable a utility to avoid capacity costs associated with prospective peaking units. Since avoidable costs are, by definition, costs that have yet to be incurred, credits should be based on

prospective capacity costs that the utility would incur "but for" the load reduction provided for by the customer with curtailable load.[9]

Q. SHOULD AN INTERRUPTIBLE RATE RECOVER ANY FIXED PRODUCTION AND TRANSMISSION COSTS?

A. No. From a pricing standpoint, interruptible rates—although they provide demand response benefits—should not be viewed as an incentive program similar to typical energy efficiency and demand-side management programs. Instead, interruptible rates should reflect basic cost principles. Fundamental economic theory demonstrates that interruptible customers do not cause the utility to incur production and bulk transmission capacity costs. For example, Professor James C. Bonbright, a recognized pricing authority, advocated pricing interruptible service to reflect no capacity-related cost of service:

> Interruptible service has been used by both gas and electric companies for peak shaving. The costs cannot be accurately determined because it is a byproduct resulting from generating and bulk transmission facilities built and operated for firm service (see Nissel, 1983). As a result, only the customer cost (e.g., customer-connected spur lines and substations) and energy costs (e.g., fuel and incremental maintenance cost) actually incurred and ***no capacity pricing cost should be included in pricing interruptible service.***
>
> While some feel that it is an impropriety to treat interruptible customers as if they were firm customers, they still opine that it would be fair and reasonable to obtain a small contribution from them for capacity costs. This is debatable.[10]

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[9] Graves, *op cit.* at 35. (references omitted).

[10] James C. Bonbright, Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Arlington, Virginia: Public Utilities Reports, Inc., 1988, at 502 (emphasis added).

Q. WHAT FACTOR SHOULD BE THE PRIMARY GUIDE IN SETTING DEMAND CREDITS FOR LG&E'S CURTAILABLE SERVICE OPTIONS?

A. In determining the capacity value of an interruptible credit, the main consideration is the long-term avoided cost of peaking generation capacity. Several recent analyses and studies put this cost in the range of $75-$136 per kW-year. For example, a 2006 U.S. Department of Energy report stated that the avoided capacity cost of a peaking unit is approximately $75 per kW-year, or $6.25 per kW-month.[11] In its RPM construct, PJM uses an administratively-set *cost of new entry* (CONE) value to represent the minimum capacity payment required to induce new capacity to enter the market. PJM's tariff defines CONE as the nominal levelized cost of a combustion turbine generating station.[12] For 2007-2011, the CONE value is $72,207 per MW-year, or $6.02 per kW-month. For 2012-2013, PJM's CONE has been set at $112,868 per MW-year, or $9.41 per kW-month.[13] These estimates are for avoided generation units only, and do not reflect additional transmission and distribution capacity cost savings that may be associated with interruptible load.

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[11] U.S. Department of Energy, *Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them* at 74 (2006). The DOE report states:

> Demand response programs designed to reduce capacity needs are valued according to the marginal cost of capacity. By convention, marginal capacity is assumed to be a "peaking unit," a generator specifically added to run in relatively few hours per year to meet peak system demand. Currently, peaking units are typically natural gas turbines with annualized capital costs on the order of $75/kilowatt-year.

[12] PJM Tariff, Attachment DD at sections 2.16 and 2.58.

[13] *Id.* at section 5.10(a)(iv).

Q. ARE THE CAPACITY VALUES FROM THE DOE REPORT AND PJM'S 2007-2011 CONE LIKELY UNDERSTATED?

A. Yes. The DOE report relies on a 2004 cost estimate, and the 2007-2011 CONE value was calculated in 2005. At the end of 2008, PJM filed to revise its CONE at FERC. In its filing, PJM explained:

> There is little dispute that construction costs have increased substantially since 2005, when the CONE estimate now in the PJM Tariff was completed. As the Commission's staff advised in a report to the Commission in June 2008, "new construction is becoming more expensive." Similarly, Cambridge Energy Research Associates reported last year that its proprietary Power Capital Costs Index "has been on an upward trend since 2000 [with] a surge that began in 2005 has [pushed] costs up 76 percent in the past three years." An extensive study by the Brattle Group (separate from the Battle Report on RPM) also documented recent electric plant increases and discussed their causes. That study shows, for example, that "the cumulative increase in the installation cost of new combined-cycle units [from 2000 to 2006] was almost 95 percent with much of this increase occurring in 2006." Moreover, according to the Handy-Whitman Index, a widely used resource that tracks electric plant cost escalations, the cost of combustion turbine power plants have increased by about 35 percent in the last three years.[14]

These significant increases in capacity costs are reflected in PJM's 2012-2013 CONE value.

The Midwest Independent System Operator (MISO) has also developed CONE values similar to those developed in PJM. For the 2009-2010 planning year, the MISO CONE was $80,000 per MW-year (or $6.67 per kW-month).[15] MISO updated its CONE for the 2010-2011 planning year, increasing it to $90,000 per MW-year (or $7.50 per kW-month).[16]

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[14] PJM Interconnection, LLC Amendments to the PJM Open Access Transmission Tariff and the Reliability Assurance Agreement under ER09-412-000 at 8-9 (December 12, 2008) (citations omitted).

[15] *See* MISO's response to KIUC 1-18 in Case No. 2010-00048. This data response is available at http://psc.ky.gov/pscscf/2010%20cases/2010-00048/.

[16] Midwest Independent System Operator, annual CONE recalculation, FERC Docket No. ER08-394-023 (July 31, 2009).

Interruptible credits reflecting long-run avoided costs from the DOE, PJM, and MISO analyses (including an 18 percent adjustment for reserves and losses) are shown in Table 1 below.[17]

Table 1. Interruptible Capacity Credits

Source	Year of Estimate	Interruptible Credit ($/kW-mo.)	
		Capacity	Reserve+Losses
DOE	2004	$6.25	$7.38
PJM	2005	$6.02	$7.10
PJM	2008	$9.41	$11.10
MISO	2008	$6.67	$7.87
MISO	2009	$7.50	$8.85

Q. IS THE AVOIDED COST OF A PEAKING GENERATING UNIT THE ONLY FACTOR THAT SHOULD BE CONSIDERED IN DEVELOPING AN INTERRUPTIBLE CREDIT?

A. No. Interruptible load helps suppliers avoid not only peaking capacity costs, but also the cost of reserve capacity that would have been required if the interruptible load were firm, as well as the cost of transmission losses. As a result, an interruptible capacity credit should be adjusted (increased) to reflect the avoided cost of reserves and losses. A reasonable rule-of-thumb for making this adjustment would be to increase the estimated avoided peaking capacity cost by 15-20 percent. (An 18-percent adjustment is used in Table 1.)

Curtailable rate options that allow economic interruptions should also reflect avoided energy costs. In my discussion of LG&E's curtailable options and credits, I focus only on avoided capacity costs and do not address avoided energy costs linked to economic interruptions. As a

[17] For example, the reserve- and loss-adjusted capacity credit for DOE shown in Table 1 is derived by multiplying the $6.25 per kW-month capacity value by 1.18.

result, the recommended credits for LG&E's curtailable rate options with economic interruptions that I discuss later are understated.

Q. SHOULD OTHER FACTORS BE TAKEN INTO ACCOUNT IN SETTING RIDER CSR'S INTERRUPTIBLE CREDIT?

A. Yes. In addition to avoiding generation capacity costs, interruptible load can be used to:

- Avoid bulk transmission costs. (None of the estimates shown in Table 1 reflects such avoided costs.)
- Promote economic development and manufacturing jobs retention. As I noted earlier, competitive rate options are often key factors in decisions by electricity-intensive firms to locate production facilities. Cost-based interruptible service helps attract and retain large, energy-intensive industrial customers that provide jobs and tax revenues—a fact that should not be forgotten in structuring LG&E's interruptible program.

Q. SHOULD AN INTERRUPTIBLE CREDIT BE BASED ON SUCH SHORT-TERM MARKET MEASURES OF CAPACITY AS THE ANNUAL COST OF CAPACITY BID IN RTO MARKETS OR AVAILABLE IN WHOLESALE MARKETS?

A. No. Short-run market prices fluctuate to reflect current market conditions for existing generating capacity, while long-run avoided costs reflect the cost of adding new capacity to meet demand growth. Long-run—not short-run—capacity costs more accurately reflect avoided cost savings attributable to interruptible service. Short-run prices do not give a clear signal regarding the cost of capacity to serve future peak demands. In addition, basing an interruptible credit or price on short-run market prices is similar to relying solely on spot market purchases to meet future energy needs—both approaches increase consumer risks via unstable and

unpredictable prices. Moreover, interruptible rates that reflect short-term price fluctuations may impede the development of robust and effective retail interruptible programs.

Firm customers may also be negatively affected by an interruptible program linked to short-run-based credits during shortage periods where short-run marginal pricing can drive the value of interruptible load far above long-run avoided costs. For example, relying on spot markets is wonderful as long as excess supply exists and prices are low. However, when generation supply becomes scarce, short-run market prices can far exceed the cost of new capacity that cannot be added immediately. In my opinion, a key to developing a stable and effective interruptible program is to rely on curtailable credits that reflect the long-run avoided cost of adding capacity—not a short-term value that reflects capacity shortages.

LG&E'S CURTAILABLE RATES

Q. PLEASE DESCRIBE LG&E'S CURRENT CURTAILABLE RATES.

A. LG&E currently offers three stand-alone curtailable options—Riders CSR1, CSR2, and CSR3. These riders are differentiated by the length of curtailment notice, maximum annual hours of curtailment permitted, types of curtailment (physical or economic buy-through), and level of the interruptible demand charge credit. (See Table 1 below.) Under Riders CRS1 and CSR3, customers receive at least 20-minutes notice before a curtailment begins. Rider CSR2 has 10-minutes notice. Both Riders CSR1 and CSR2 allow buy-through in all curtailment hours, but Rider CSR3 has no buy-through. Riders CSR1 and CSR2 allow LG&E to curtail up to 200 and 425 hours, respectively, each year, while Rider CSR3 physical curtailments are limited to 100 hours annually. Interruptible credits range from slightly above $3 per kW-month for Rider CSR3 to around $5 per kW-month for Riders CSR1 and CSR2. LG&E currently

serves two curtailable customers—one under Rider CSR1 and one under Rider CSR3. LG&E serves 2 customers under Rider CSR1. No customers are served under Rider CSR2.

Table 2. KU and LG&E: Current Curtailable Options

Item	CSR1	CSR2	CSR3
Notice (minutes)	20	10	20
Curtailment Hours			
Physical	0	0	100
Buy-Through	200	425	0
Total	200	425	100
Credit ($/kW-mo)			
Primary	5.20	5.69	3.20
Transmission	5.10	5.59	3.10
Customers			
KU	1	0	1
LG&E	2	0	0

Q. HAS LG&E PROPOSED MAJOR CHANGES IN ITS CURTAILABLE SERVICE OPTIONS?

A. Yes. In this case, LG&E has proposed replacing its three existing riders with a single curtailable rate option—Rider CSR. This new rider:

- Retains the credits in Rider CSR1 for primary and transmission service customers. The proposed CSR credits are less than the existing CSR2 credits and more than the current CSR3 credits.
- Increases the hours of curtailment relative to curtailment hours under each existing rider—with the largest increases going to the only curtailable riders with customers (that is, CSR1 and CSR3). For example, the 500 hours of maximum allowable curtailment under Rider CSR represent a 150-percent increase in curtailment hours for Rider CSR1 customers (200 hours to 500 hours) and a 400-percent increase for the sole CSR3 customer (100 hours to 500 hours).

- Subjects customers to both physical and economic buy-through curtailments. As I noted earlier, all curtailments under current Riders CSR1 and CSR2 are buy-through curtailments, while Rider CSR3 has only physical curtailments.
- Changes the way a customer's monthly curtailable demand is calculated. Under Rider CSR, a customer's monthly curtailable demand (the demand for which the customer receives a credit) will be restricted to measurements during hours in which LG&E's system demands are expected to be highest. LG&E has proposed restricting measurement of curtailable demand to the Peak and Intermediate period proposed in its new rate schedules—that is, 10 a.m.-10 p.m., Monday-Friday during May-September, and 6:00 a.m.-10:00 p.m. Monday-Friday during October-April.
- Modifies how buy-through energy is priced. Under the existing curtailable riders, buy-through energy is priced to reflect market-based prices. Under Rider CSR, the price of buy-through energy will be determined using a formula based on an indexed cost of natural gas and a fixed heat rate (12,000 Btu per kWh) that reflects an assumed heat rate for single-cycle combustion turbine.

Some of the key features of LG&E's proposed Rider CSR compared to its current curtailable riders are shown in Table 3 below.

Table 3. KU and LG&E: Current and Proposed Curtailable Options

Item	CSR1	CSR2	CSR3	CSR
Notice (minutes)	20	10	20	10
Curtailment Hours				
Physical	0	0	100	100
Buy-Through	200	425	0	400
Total	200	425	100	500
Credit ($/kW-mo)				
Primary	5.20	5.69	3.20	5.20
Transmission	5.10	5.59	3.10	5.10

Q. DID LG&E CONSULT CURRENT CURTAILABLE CUSTOMERS BEFORE DECIDING ON THE CHANGES PROPOSED IN RIDER CSR?

A. No.[18]

Q. ARE THE CURTAILABLE CREDITS REFLECTED IN LG&E'S PROPOSED RIDER CSR TOO LOW?

A. Yes. The proposed Rider CSR credits are less than the credits in the current Rider CSR2, which has 75 fewer hours of maximum curtailment and no hours of physical curtailment. The proposed credits are also well below credits based on the long-run avoided costs analyses that I summarized in Table 1 earlier. Finally, the credits are far below credits indicated by my analysis of the avoided cost of a combustion turbine using a standard carrying cost approach. In this analysis, I estimated the implied credits for interruptible load to be $9.11 per kW-month for transmission customers and $9.28 per kW-month for primary customers. (See Exhibit DWG-2.) These estimates are in line with the avoided cost values shown in Table 1.

Q. WHY DID LG&E SET THE CSR CREDITS FAR BELOW VALUES INDICATED BY THE LONG-RUN AVOIDED COST OF COMBUSTION TURBINE CAPACITY?

A. According to LG&E, credits in the current curtailable riders overstate the value of interruptible load. Speaking about the current credits in Rider CSR1, LG&E witness Steven Seelye states:

[18] *See* LG&E's responses to KIUC data request 1-17.j and KPSC data request 2-86.b in Exhibit DWG-1.

> When the credits set forth in CSR1 were developed they were based on the estimated carrying costs associated with a combustion turbine. In today's economic environment, these credits significantly overstate the value of curtailable service. Currently, the Company can purchase capacity in the marketplace at a much lower cost than the value of the credits being provided to its curtailable customers.[19]

Q. DO YOU AGREE WITH LG&E?

A. No. As I pointed out earlier, setting administratively determined curtailable credits to reflect short-run market conditions is a short-sighted and improper approach that ignores the long-term commitment (either contractual or operational) reflected in the demand for interruptible service by many large, electricity-intensive customers. Moreover, a short-run focus in setting these credits is akin to asking a utility to base its test-year revenue requirement to reflect current market conditions instead of costs incurred to make long-lived investments in generation, transmission, and distribution plant and equipment. A utility might like that option when capacity is constrained and prices are high, but would abhor it when excess capacity drives market prices down temporarily.

Q. DO YOU HAVE OTHER CONCERNS ABOUT THE PROPOSED CSR CREDITS?

A. Yes. LG&E is asking curtailable customers to accept more hours of curtailment at a lower credit than they can currently get under Rider CSR2—an outcome that is counter-intuitive at best. At a minimum, one would expect the CSR credits to be higher than the current CSR2 credits given that Rider CSR not only increases maximum curtailment hours, but also exposes all curtailable customers to 100 hours of physical curtailment without buy-through.

[19] *See* Steven Seelye, direct testimony at 22:12-23:3.

Q. IS LG&E'S PROPOSAL TO LIMIT CURTAILMENT SERVICE TO A 10-MINUTES NOTICE OPTION REASONABLE?

A. No. A 10-minutes notice curtailable option should be available to customers, but it should not be the only option that LG&E offers. A 10-minutes notice option is more valuable than a longer notice option (60 minutes) since it reduces the response time for using curtailable load during system emergencies. A 10-minutes notice corresponds to the minimum response time required to treat interruptible load as spinning reserve capacity.[20] However, not all customers may be able to curtail load with only 10-minutes notice because of operating and safety constraints. Most utilities—including LG&E currently—recognize and address constraints facing customers by tailoring curtailable rate options with different notice requirements, as well as hours and frequency of interruption. LG&E now proposes to force all customers into a one-size-fits-all curtailable rate option that may be unsuitable not only for some current curtailable customers, but also for new customers that may require interruptible service to locate or expand production facilities in Kentucky.

Q. DO YOU OBJECT TO LG&E'S PROPOSAL TO CHANGE THE WAY BUY-THROUGH ENERGY IS PRICED?

A. I do not object at this time, although I prefer a market-based pricing approach. LG&E's decision to price buy-through energy on the basis of a fixed heat rate and an indexed natural gas price (*Gas Daily* Dominion-South Point) is intended to reflect the cost of operating a combustion turbine. That approach seems both intuitive and reasonable. My concern is that buy-though prices linked to an indexed natural gas price and a fixed heat rate may not be indicative of actual market prices for short-term energy. Under LG&E's proposal, customers face the risk of extremely

[20] *See* LG&E's response to KIUC data request 1-19 in Exhibit DWG-1.

high buy-through prices if natural gas prices increase significantly from current levels.[21] Moreover, even though LG&E's buy-through pricing model might produce results that tend to track short-term energy prices reasonably well in many situations, multiple factors can cause short-term energy prices and buy-through prices from LG&E's pricing model to diverge significantly. This issue deserves more analysis that either LG&E or I have presented in this case. If LG&E's buy-through pricing approach is approved in this case, it should be further reviewed and evaluated in a future case to determine if it produces reasonable and fair results.

Q. HOW DOES LG&E CURRENTLY DETERMINE THE AMOUNT OF ENERGY A CUSTOMER PURCHASES DURING A BUY-THROUGH CURTAILMENT?

A. Under Riders CSR1 and CSR2, a customer's buy-through energy during a curtailment equals a take-or-pay block of power that LG&E agrees to purchase on behalf of the customer at a stated market price to meet the customer's curtailable load requirements.

Q. WILL THE DETERMINATION OF BUY-THROUGH ENERGY CHANGE UNDER RIDER CSR?

A. Yes. Rider CSR does not link buy-through energy to take-or-pay blocks of energy that LG&E purchases on a customer's behalf. Instead, Rider CSR sets buy-through energy during a curtailment equal to the:

- Difference between an Option A customer's measured demand and firm load during a curtailment, times the number of hours in the curtailment.
- Curtailable load designated in an Option B customer's contract times the number of hours in the curtailment.

[21] For example, under LG&E's proposal, the price of buy-through energy would be $156 per MWh at an indexed gas price of $13 per MMBtu.

The buy-through pricing formula is applied to a customer's buy-through energy to determine the customer's total buy-through cost.

Q. DO YOU AGREE WITH LG&E'S RIDER CSR METHOD OF CALCULATING BUY-THROUGH ENERGY DURING A CURTAILMENT?

A. No. The CSR method retains the basic take-or-pay feature for measuring buy-through energy under LG&E's current curtailable riders by assuming the customer has a 100-percent load factor curtailable load during a curtailment. This approach—which forces buy-through customers to pay for energy they neither want nor use—may be reasonable if LG&E actually buys blocks of power to supply curtailable load during buy-through curtailments. However, Rider CSR does not link buy-through energy to off-system market purchases that actually require LG&E to buy a take-or-pay block of energy. Instead, LG&E can supply the CSR buy-through energy through either system supply resources, market purchases that may or may not be take-or-pay purchases, or a combination of system supply and market purchases. In my opinion, curtailable customers should not pay for phantom kWh on a take-or-pay basis. They should be charged only for buy-through energy they use during a curtailment.

Q. HOW COULD A CUSTOMER'S BUY-THROUGH ENERGY BE DETERMINED UNDER RIDER CSR WITHOUT A TAKE-OR-PAY FEATURE?

A. A straightforward approach for an Option A customer under Rider CSR would be to set the customer's buy-through curtailment energy equal to the customer's total energy use during the curtailment, less the customer's firm demand times the number of hours in the curtailment. In other words, instead of assuming a 100-percent load factor for the customer's

curtailable load, assume a 100-percent load factor for the customer's firm demand during a curtailment.

At the current time, buy-through energy for Option B customers should continue to be priced on a take-or-pay basis as LG&E proposes. An Option B customer agrees to provide a specified amount of curtailable load when requested by LG&E. As a result, pricing buy-through energy for Option B customers could be viewed similarly to either a block energy purchase or my recommended approach for handling firm demand in estimating an Option A customer's buy-through energy—that is, assume the Option B curtailable load has a 100-percent load factor. If this pricing approach is adopted for Option B customers in this case, I recommend that it be evaluated and considered again in a future LG&E rate case to determine if a better way exists to price Option B buy-through energy.

Q. WILL RIDER CSR'S AVAILABILITY BE RESTRICTED?

A. Yes. LG&E has proposed restricting Rider CSR's availability to no more than 200 MW of total requirements subject to curtailment. LG&E provides no information that this limit is large enough even to accommodate current CSR1 and CSR3 curtailable customers, much less new customers that might want and need curtailable service. Regarding the 200-MW limit, LG&E says the following:

> The 200 MW limit has long term planning implications. Since customers have the ability to exit the CSR, the Company must consider the extended time horizon for planning and constructing new generation resources. For example, a higher CSR limit could pose risk if customers decided to exit curtailable service, since the Company would be required to provide additional supply without sufficient planning and construction timelines.[22]

[22] *See* LG&E's response to KIUC data request 1-17.b in Exhibit DWG-1.

Q. SHOULD LG&E BE ALLOWED TO RESTRICT RIDER CSR'S AVAILABILITY TO 200 MW?

A. No. The 200-MW limit appears unreasonable and not based on any demonstrable risk that LG&E faces. For example, LG&E's testimony does not indicate whether the 200-MW limit could even accommodate the curtailable loads of current CSR1 and CSR3 customers—much less new curtailable loads. Moreover, for many large customers with electricity-intensive manufacturing processes, firm electric service is not an economically viable alternative. Such customers are likely to remain long-term curtailable customers. However, if potential switching from curtailable to firm service imposes real and demonstrable planning and financial risks to LG&E, then LG&E can take such steps as increasing the contract term requirement for curtailable service or including contract provisions that address costing and pricing issues that might arise if customers switch from interruptible to firm service. Imposing an arbitrary availability limit on Rider CSR service is not an optimal solution to an undefined problem. Notwithstanding my concerns, if the Commission decides that some limit on the availability of curtailable service is in the public interest, than I recommend setting the limit initially at no less than the current MW of CSR1 and CSR3 curtailable load that LG&E serves plus an additional 100 MW. This interim compromise should address LG&E's expressed concerns while still providing a reasonable opportunity for current and future curtailable customers to find a curtailable option that fits their requirements.

RIDERS CSR10 AND CSR30

Q. DO YOU AGREE WITH LG&E'S PROPOSAL TO REPLACE RIDERS CSR1, CSR2, AND CSR3 WITH RIDER CSR?

A. No. The proposed Rider CSR changes are overly restrictive, too abrupt, and likely to impede the continued development of curtailable resources on the LG&E system.

Q. HAVE YOU DEVELOPED RECOMMENDED ALTERNATIVES TO RIDER CSR?

A. Yes. I recommend consolidating LG&E's existing curtailable rate options into two options—Rider CSR10 and Rider CSR30. Key features of the new riders are as follows:

- Rider CSR10 has a 10-minutes notice, and Rider CSR30 has a 30-minutes notice.
- Each rider's availability is limited to the total MW of curtailable requirements subject to curtailment under Riders CSR1 and CSR3 as of June 30, 2010, plus an additional 100 MW of curtailable load subject to curtailment under combined Riders CSR10 and CSR30. This provision ensures that current curtailable customers can shift their curtailable requirements to either Rider CSR10 or Rider CSR30, and new customers can add a total of 100 MW of additional curtailable load served under the new riders.
- Both riders increase maximum curtailment hours (relative to current riders) to 350 hours, of which 100 hours may be physical curtailment and 250 hours may be buy-through curtailment.
- Rider CSR10 has credits of $5.40 and $5.50 per kW-month for transmission and primary customers, respectively. Rider

CSR30 has somewhat lower credits—$5.20 per kW-month for transmission customers and $5.30 per kW-month per kW-month for primary customers.

- Both riders require LG&E to give a good faith estimate of a curtailment's estimated duration when LG&E issues a curtailment notice.
- Both riders eliminate take-or-pay billing for Option A customers that buy-through a curtailment, and instead charge only for buy-through energy that Option A customers actually use during a buy-through curtailment. Option B customers will be billed for buy-though energy on a take-or-pay basis as proposed by LG&E in Rider CSR.
- Both riders allow a customer to avoid noncompliance penalties if the customer agrees to install, pay for, and cede to LG&E control of equipment necessary for LG&E to disconnect (curtail) all of the customer's load in excess of firm contract demand. By effectively giving LG&E a mechanical switch to isolate and disconnect curtailable load, a customer should never be subject to noncompliance penalties.

I present Rider CSR10 in Exhibit DWG-3 and Rider CSR30 in Exhibit DWG-4.

Q. HOW DO KEY PROVISIONS OF RIDERS CSR10 AND CSR30 DIFFER FROM RIDER CSR?

A. Some of the key differences are highlighted in Table 4 below and Exhibit DWG-5. In general, Riders CSR10 and CSR30 provide more flexibility with respect to curtailment notice, have 150 fewer hours of total curtailments permitted (although all of the riders allow 100 hours of physical curtailment), and have higher credits than Rider CSR.

Table 4. LG&E Rider CSR vs KIUC Riders CSR10 and CSR30

Item	CSR	CSR10	CSR30
Notice (minutes)	10	10	30
Curtailment Hours			
Physical	100	100	100
Buy-Through	400	250	250
Total	500	350	350
Credit ($/kW-mo)			
Primary	5.20	5.50	5.30
Transmission	5.10	5.40	5.20

Q. DO BUY-THROUGH PROVISIONS IN YOUR RECOMMENDED RIDERS CSR10 AND CSR30 DIFFER FROM THOSE IN LG&E'S RIDER CSR?

A. Yes. Riders CSR10 and CSR30 differ from Rider CSR with respect to the determination of buy-through energy for Option A customers. More specifically, my proposed curtailable riders define buy-through energy for Option A customers as the difference between a customer's total kWh use during a curtailment, less the product of the customer's firm demand and the number of hours in the curtailment. Earlier I discussed why this modification is necessary to ensure that Option A curtailable customers are not forced to pay for kWh they do not use. I also explained why LG&E's proposed method of determining buy-through kWh for Option B customers should be approved in this case.

Q. SHOULD THE COMMISSION ADOPT YOUR RECOMMENDED RIDERS CSR10 AND CSR30 INSTEAD OF LG&E'S RIDER CSR?

A. Yes. I developed Riders CSR10 and CSR30 to balance the interests of both LG&E and curtailable customers. In my opinion, adopting LG&E's Rider CSR will impede the development of curtailable load on the LG&E system, reduce long-term benefits to both firm and interruptible customers, and force LG&E to lean more heavily on supply-side resources. Riders

CSR10 and CSR30 correct key deficiencies in Rider CSR without reducing the reliability and economic benefits associated with curtailable load.

I recognize that the curtailable credits in my recommended Riders CSR10 and CSR30 are too low, and are not very different from the CSR credits that LG&E proposed and I criticized. Although I strongly disagree with LG&E's focus on short-run market conditions in setting the level of Rider CSR curtailable credits, I recognize that moving credits significantly higher at this time to track the long-run avoided cost of combustion turbine capacity may be difficult during a consolidation of LG&E's curtailable rate options. During this consolidation and transition phase, credit adjustments may have to be tempered and balanced against other interrelated changes taking place (for example, changes in curtailment hours, types of curtailments, and measures of curtailable demand). As a result, my decision to move curtailable only slightly above those in Rider CSR1 should be viewed as an interim step in moving credits steadily closer to the underlying long-run value of curtailable service in future cases.

Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A. Yes.

AFFIDAVIT

Commonwealth of Virginia)
County of Fairfax) SS

Before me this day appeared DENNIS W. GOINS of Potomac Management Group, who stated under oath that the foregoing testimony was prepared by him or under his direct supervision and control; that he has knowledge of the matters set forth in said testimony; and that such matters are true and correct to the best of his knowledge, information, and belief.

Subscribed and sworn to me this 20th day of April 2010.

Dennis W. Goins

Notary Public

REYNA MARIBEL VANEGAS
Notary Public
Commonwealth of Virginia
320413
My Commission Expires Jan 31, 2014

My Commission Expires: Jan. 31, 2014

APPENDIX

QUALIFICATIONS OF

DENNIS W. GOINS

DENNIS W. GOINS

PRESENT POSITION

Economic Consultant, Potomac Management Group, Alexandria, VA

PREVIOUS POSITIONS

- Vice President, Hagler, Bailly & Company, Washington, DC
- Principal, Resource Consulting Group, Inc., Cambridge, MA
- Senior Associate, Resource Planning Associates, Inc., Cambridge, MA
- Economist, North Carolina Utilities Commission, Raleigh, NC

EDUCATION

College	Major	Degree
Wake Forest University	Economics	BA
North Carolina State University	Economics	ME
North Carolina State University	Economics	PhD

RELEVANT EXPERIENCE

Dr. Goins specializes in pricing, planning, and market structure issues affecting firms that buy and sell products in electricity and natural gas markets. He has extensive experience in evaluating competitive market conditions, analyzing power and fuel requirements, prices, market operations, and transactions, developing product pricing strategies, setting rates for energy-related products and services, and negotiating power supply and natural gas contracts for private and public entities. He has participated in more than 100 cases as an expert on competitive market issues, utility restructuring, power market planning and operations, utility mergers, rate design, cost of service, and management prudence before the Federal Energy Regulatory Commission, the General Accounting Office, the First Judicial District Court of Montana, the Circuit Court of Kanawha County, West Virginia, and regulatory commissions in Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Hawaii, Idaho, Illinois, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, New Jersey, New York, North Carolina, Ohio, Oklahoma, South Carolina, Texas, Utah, Vermont, Virginia, and the District of Columbia. He has also prepared an expert report on behalf of the United States regarding pricing and contract issues in a case before the United States Court of Federal Claims.

Dennis W. Goins

PARTICIPATION IN REGULATORY, ADMINISTRATIVE, AND COURT PROCEEDINGS

1. Dominion North Carolina Power, before the North Carolina Utilities Commission, Docket No. E-22, Sub 459 (2010), on behalf of Nucor Steel-Hertford, re cost of service and retail rate design.
2. Entergy Texas, Inc., before the Public Utilities Commission of Texas, PUC Docket No. 37744 (2010), on behalf of Texas Cities, re cost of service and retail rate design.
3. Kentucky Utilities, Inc., before the Kentucky Public Service Commission, Case No. 2009-00548 (2010), on behalf of the Kentucky Industrial Utility Customers, re interruptible rates.
4. Louisville Gas and Electric Company, Inc., before the Kentucky Public Service Commission, Case No. 2009-00549 (2010), on behalf of the Kentucky Industrial Utility Customers, re interruptible rates.
5. Ohio Edison *et al.*, before the Public Utilities Commission of Ohio, Case No. 09-1948-EL-POR *et al.*, (2010), on behalf of Nucor Steel Marion, Inc., re energy efficiency and peak demand reduction portfolios.
6. Kauai Island Utility Cooperative, before the Hawaii Public Utilities Commission, Docket No. 2009-0050 (2010), on behalf of Kauai Marriott Resort & Beach Club, re retail cost allocation and rate design issues.
7. Entergy Arkansas, Inc., before the Arkansas Public Service Commission, Docket No. 09-024-U (2009), on behalf of Arkansas Electric Energy Consumers, Inc., re power plant environmental retrofit.
8. Appalachian Power Company, before the Virginia State Corporation Commission, Case No. PUE-2009-00030 (2009), on behalf of Steel Dynamics, Inc., re retail cost allocation and rate design issues.
9. Ohio Edison *et al.*, before the Public Utilities Commission of Ohio, Case No. 09-906-EL-SSO (2009), on behalf of Nucor Steel Marion, Inc., re market rate offer.
10. Dominion North Carolina Power, before the North Carolina Utilities Commission, Docket No. E-22, Sub 456 (2009), on behalf of Nucor Steel-Hertford, re fuel cost adjustment.
11. Appalachian Power Company, before the Virginia State Corporation Commission, Case No. PUE-2009-00068 (2009), on behalf of Steel Dynamics, Inc., re demand response programs.
12. Indiana Michigan Power Company, before the Indiana Utility Regulatory Commission, Cause No. 43750 (2009), on behalf of Steel Dynamics, Inc., re wind power purchased power agreement.

13. Entergy Arkansas, Inc., before the Arkansas Public Service Commission, Docket No. 07-085-TF (2009), on behalf of Arkansas Electric Energy Consumers, Inc., re energy efficiency cost recovery.
14. CenterPoint Energy Arkansas Gas, before the Arkansas Public Service Commission, Docket No. 07-081-TF (2009), on behalf of Arkansas Gas Consumers, Inc., re energy efficiency cost recovery.
15. South Carolina Electric & Gas Company, before the South Carolina Public Service Commission, Docket No. 2009-261-E (2009), on behalf of CMC Steel-SC, re DSM cost recovery surcharge.
16. Duke Energy Indiana, Inc., before the Indiana Utility Regulatory Commission, Cause No. 38707 FAC81 (2009), on behalf of Steel Dynamics, Inc., re fuel and purchased power cost recovery.
17. Potomac Electric Power Company, before the District of Columbia Public Service Commission, Formal Case No. 1076 (2009), on behalf of the General Services Administration, re retail cost allocation and standby rate design issues for distributed generation resources.
18. Appalachian Power Company, before the Virginia State Corporation Commission, Case No. PUE-2009-00039 (2009), on behalf of Steel Dynamics, Inc., re environmental and reliability cost recovery.
19. Indiana Michigan Power Company, before the Indiana Utility Regulatory Commission, Cause No. 38702 – FAC 63 (2009), on behalf of Steel Dynamics, Inc., re fuel and purchased power cost recovery.
20. Appalachian Power Company, before the Virginia State Corporation Commission, Case No. PUE-2009-302-00038 (2009), on behalf of Steel Dynamics, Inc., re fuel and purchased power cost recovery.
21. South Carolina Electric & Gas Company, before the South Carolina Public Service Commission, Docket No. 2008-302-E (2008), on behalf of CMC Steel-SC, re fuel and purchased power cost recovery.
22. South Carolina Electric & Gas Company, before the South Carolina Public Service Commission, Docket No. 2008-196-E (2008), on behalf of CMC Steel-SC, re base load review order for a nuclear facility.
23. Ohio Edison *et al.*, before the Public Utilities Commission of Ohio, Case No. 08-935-EL-SSO *et al.* (2008), on behalf of Nucor Steel Marion, Inc., re standard service offer via an electric security plan.
24. Ohio Edison *et al.*, before the Public Utilities Commission of Ohio, Case No. 08-936-EL-SSO (2008), on behalf of Nucor Steel Marion, Inc., re market rate offer via a competitive bidding process.

25. Alabama Power Company, before the Alabama Public Service Commission, Docket No. 18148 (2008), on behalf of CMC Steel Alabama, Nucor Steel Birmingham, Inc., and Nucor Steel Tuscaloosa, Inc, re energy cost recovery.
26. Entergy Texas, Inc., before the Public Utilities Commission of Texas, PUC Docket No. 35269 (2008), on behalf of Texas Cities, re jurisdictional allocation of system agreement payments.
27. Duke Energy Indiana, Inc., before the Indiana Utility Regulatory Commission, Cause No. 43374 (2008), on behalf of Nucor Steel and Steel Dynamics, Inc., re alternative regulatory plan.
28. Entergy Gulf States Inc., before the Public Utilities Commission of Texas, PUC Docket No. 34800 (2008), on behalf of Texas Cities, re affiliate transactions.
29. Commonwealth Edison Company, before the Illinois Commerce Commission, Docket No. 07-0566 (2008), on behalf of Nucor Steel Kankakee, Inc., re cost-of-service and rate design issues.
30. Ohio Edison *et al.*, before the Public Utilities Commission of Ohio, Case No. 07-0551-EL-AIR *et al.* (2008), on behalf of Nucor Steel Marion, Inc., re cost-of-service and rate design issues.
31. Appalachian Power Company dba American Electric Power, before the Public Service Commission of West Virginia, Case No. 06-0033-E-CN (2007), on behalf of Steel of West Virginia, Inc., re power plant cost recovery mechanism.
32. Oncor Electric Delivery Company and Texas Energy Future Holdings Limited Partnership, before the Public Utilities Commission of Texas, PUC Docket No. 34077 (2007), on behalf of Nucor Steel - Texas, re acquisition of TXU Corp. by Texas Energy Future Holdings Limited Partnership.
33. Arkansas Oklahoma Gas Company, before the Arkansas Public Service Commission, Docket No. 07-026-U (2007), on behalf of West Central Arkansas Gas Consumers, re gas cost-of-service and rate design issues.
34. Idaho Power Company, before the Idaho Public Utilities Commission, Case No. IPC-E-07-08 (2007), on behalf of the U.S. Department of Energy (Federal Executive Agencies), re cost-of-service and rate design issues.
35. Potomac Electric Power Company, before the District of Columbia Public Service Commission, Formal Case No. 1056 (2007), on behalf of the General Services Administration, re demand-side management and advanced metering programs.

36. South Carolina Electric & Gas Company, before the South Carolina Public Service Commission, Docket No. 2007-229-E (2007), on behalf of CMC Steel-SC, re cost-of-service and rate design issues.

37. Potomac Electric Power Company, before the Maryland Public Service Commission, Case No. 9092 (2007), on behalf of the General Services Administration, re retail cost allocation and standby rate design issues for distributed generation resources.

38. Potomac Electric Power Company, before the District of Columbia Public Service Commission, Formal Case No. 1053 (2007), on behalf of the General Services Administration, re retail cost allocation and standby rate design issues for distributed generation resources.

39. Entergy Gulf States Inc., before the Public Utilities Commission of Texas, PUC Docket No. 32907 (2006), on behalf of Texas Cities, re hurricane cost recovery.

40. Entergy Gulf States Inc., before the Public Utilities Commission of Texas, PUC Docket No. 32710/ SOAH Docket No. 473-06-2307 (2006), on behalf of Texas Cities, re reconciliation of fuel and purchased power costs.

41. Florida Power & Light Company, before the Florida Public Service Commission, Docket No. 060001-EI (2006), on behalf of the U.S. Air Force (Federal Executive Agencies), re fuel and purchased power cost recovery.

42. Arizona Public Service Company, before the Arizona Corporation Commission, Docket No. E-01345A-05-0816 (2006), on behalf of the U.S. Air Force (Federal Executive Agencies), re retail cost allocation and rate design issues.

43. PacifiCorp (dba Rocky Mountain Power), before the Utah Public Service Commission, Docket No. 06-035-21 (2006), on behalf of the U.S. Air Force (Federal Executive Agencies), re rate design issues.

44. South Carolina Electric & Gas Company, before the South Carolina Public Service Commission, Docket No. 2006-2-E (2006), on behalf of CMC Steel-SC, re fuel and purchased power cost recovery.

45. Entergy Gulf States Inc., before the Public Utilities Commission of Texas, PUC Docket No. 31544/ SOAH Docket No. 473-06-0092 (2006), on behalf of Texas Cities, re transition to competition rider.

46. Idaho Power Company, before the Idaho Public Utilities Commission, Case No. IPC-E-05-28 (2006), on behalf of the U.S. Department of Energy (Federal Executive Agencies), re cost-of-service and rate design issues.

47. Alabama Power Company, before the Alabama Public Service Commission, Docket No. 18148 (2005), on behalf of SMI Steel-Alabama, re energy cost recovery.
48. Florida Power & Light Company, before the Florida Public Service Commission, Docket No. 050001-EI (2005), on behalf of the U.S. Air Force (Federal Executive Agencies), re fuel and capacity cost recovery.
49. Entergy Gulf States Inc., before the Public Utilities Commission of Texas, PUC Docket No. 31315/ SOAH Docket No. 473-05-8446 (2005), on behalf of Texas Cities, re incremental purchased capacity cost rider.
50. Florida Power & Light Company, before the Florida Public Service Commission, Docket No. 050045-EI (2005), on behalf of the U.S. Air Force (Federal Executive Agencies), re cost-of-service and interruptible rate issues.
51. Arkansas Electric Cooperative Corporation, before the Arkansas Public Service Commission, Docket No. 05-042-U (2005), on behalf of Nucor Steel and Nucor-Yamato Steel, re power plant purchase.
52. Arkansas Electric Cooperative Corporation, before the Arkansas Public Service Commission, Docket No. 04-141-U (2005), on behalf of Nucor Steel and Nucor-Yamato Steel, re cost-of-service and rate design issues.
53. Dominion North Carolina Power, before the North Carolina Utilities Commission, Docket No. E-22, Sub 412 (2005), on behalf of Nucor Steel-Hertford, re cost-of-service and interruptible rate issues.
54. Public Service Company of Colorado, before the Colorado Public Utilities Commission, Docket No. 04S-164E (2004), on behalf of the U.S. Air Force (Federal Executive Agencies), re cost-of-service and interruptible rate issues.
55. CenterPoint Energy Houston Electric, LLC, *et al.*, before the Public Utility Commission of Texas, PUC Docket No. 29526 (2004), on behalf of the Coalition of Commercial Ratepayers, re stranded cost true-up balances.
56. PacifiCorp, before the Utah Public Service Commission, Docket No. 04-035-11 (2004), on behalf of the U.S. Air Force (United States Executive Agencies), re time-of-day rate design issues.
57. Arizona Public Service Company, before the Arizona Corporation Commission, Docket No. E-01345A-03-0347 (2004), on behalf of the U.S. Air Force (Federal Executive Agencies), re retail cost allocation and rate design issues.

58. Idaho Power Company, before the Idaho Public Utilities Commission, Case No. IPC-E-03-13 (2004), on behalf of the U.S. Department of Energy (Federal Executive Agencies), re retail cost allocation and rate design issues.

59. PacifiCorp, before the Utah Public Service Commission, Docket No. 03-2035-02 (2004), on behalf of the U.S. Air Force (United States Executive Agencies), re retail cost allocation and rate design issues.

60. Dominion Virginia Power, before the Virginia State Corporation Commission, Case No. PUE-2000-00285 (2003), on behalf of Chaparral (Virginia) Inc., re recovery of fuel costs.

61. Jersey Central Power & Light Company, before the New Jersey Board of Public Utilities, BPU Docket No. ER02080506, OAL Docket No. PUC-7894-02 (2002-2003), on behalf of New Jersey Commercial Users, re retail cost allocation and rate design issues.

62. Public Service Electric and Gas Company, before the New Jersey Board of Public Utilities, BPU Docket No. ER02050303, OAL Docket No. PUC-5744-02 (2002-2003), on behalf of New Jersey Commercial Users, re retail cost allocation and rate design issues.

63. South Carolina Electric & Gas Company, before the South Carolina Public Service Commission, Docket No. 2002-223-E (2002), on behalf of SMI Steel-SC, re retail cost allocation and rate design issues.

64. Montana Power Company, before the First Judicial District Court of Montana, *Great Falls Tribune et al. v. the Montana Public Service Commission*, Cause No. CDV2001-208 (2002), on behalf of a media consortium (*Great Falls Tribun*e, *Billings Gazett*e, *Montana Standar*d, *Helena Independent Recor*d, *Missoulia*n, Big Sky Publishing, Inc. dba *Bozeman Daily Chronicl*e, the Montana Newspaper Association, *Miles City Sta*r, *Livingston Enterpris*e, Yellowstone Public Radio, the Associated Press, Inc., and the Montana Broadcasters Association), re public disclosure of allegedly proprietary contract information.

65. Louisville Gas & Electric *et al.*, before the Kentucky Public Service Commission, Administrative Case No. 387 (2001), on behalf of Gallatin Steel Company, re adequacy of generation and transmission capacity in Kentucky.

66. PacifiCorp, before the Utah Public Service Commission, Docket No. 01-035-01 (2001), on behalf of Nucor Steel, re retail cost allocation and rate design issues.

67. TXU Electric Company, before the Public Utilities Commission of Texas, PUC Docket No. 23640/ SOAH Docket No. 473-01-1922 (2001), on behalf of Nucor Steel, re fuel cost recovery.

68. FPL Group *et al.*, before the Federal Energy Regulatory Commission, Docket No. EC01-33-000 (2001), on behalf of Arkansas Electric Cooperative Corporation, Inc., re merger-related market power issues.

69. Entergy Mississippi, Inc., *et al.*, before the Mississippi Public Service Commission, Docket No. 2000-UA-925 (2001), on behalf of Birmingham Steel-Mississippi, re appropriate regulatory conditions for merger approval.

70. TXU Electric Company, before the Public Utilities Commission of Texas, PUC Docket No. 22350/ SOAH Docket No. 473-00-1015 (2000), on behalf of Nucor Steel, re unbundled cost of service and rates.

71. PacifiCorp, before the Utah Public Service Commission, Docket No. 99-035-10 (2000), on behalf of Nucor Steel, re using system benefit charges to fund demand-side resource investments.

72. Entergy Arkansas, Inc. *et al.*, before the Arkansas Public Service Commission, Docket No. 00-190-U (2000), on behalf of Nucor-Yamato Steel and Nucor Steel-Arkansas, re the development of competitive electric power markets in Arkansas.

73. Entergy Arkansas, Inc. *et al.*, before the Arkansas Public Service Commission, Docket No. 00-048-R (2000), on behalf of Nucor-Yamato Steel and Nucor Steel-Arkansas, re generic filing requirements and guidelines for market power analyses.

74. ScottishPower and PacifiCorp, before the Utah Public Service Commission, Docket No. 98-2035-04 (1999), on behalf of Nucor Steel, re merger conditions to protect the public interest.

75. Dominion Resources, Inc. and Consolidated Natural Gas Company, before the Virginia State Corporation Commission, Case No. PUA990020 (1999), on behalf of the City of Richmond, re market power and merger conditions to protect the public interest.

76. Houston Lighting & Power Company, before the Public Utility Commission of Texas, Docket No. 18465 (1998) on behalf of the Texas Commercial Customers, re excess earnings and stranded-cost recovery and mitigation.

77. PJM Interconnection, LLC, before the Federal Energy Regulatory Commission, Docket No. ER98-1384 (1998) on behalf of Wellsboro Electric Company, re pricing low-voltage distribution services.

78. DQE, Inc. and Allegheny Power System, Inc., before the Federal Energy Regulatory Commission, Docket Nos. ER97-4050-000, ER97-4051-000, and EC97-46-000 (1997) on behalf of the Borough of Chambersburg, re market power in relevant markets.

79. GPU Energy, before the New Jersey Board of Public Utilities, Docket No. EO97070458 (1997) on behalf of the New Jersey Commercial Users Group, re unbundled retail rates.

80. GPU Energy, before the New Jersey Board of Public Utilities, Docket No. EO97070459 (1997) on behalf of the New Jersey Commercial Users Group, re stranded costs.

81. Public Service Electric and Gas Company, before the New Jersey Board of Public Utilities, Docket No. EO97070461 (1997) on behalf of the New Jersey Commercial Users Group, re unbundled retail rates.

82. Public Service Electric and Gas Company, before the New Jersey Board of Public Utilities, Docket No. EO97070462 (1997) on behalf of the New Jersey Commercial Users Group, re stranded costs.

83. DQE, Inc. and Allegheny Power System, Inc., before the Federal Energy Regulatory Commission, Docket Nos. ER97-4050-000, ER97-4051-000, and EC97-46-000 (1997) on behalf of the Borough of Chambersburg, Allegheny Electric Cooperative, Inc., and Selected Municipalities, re market power in relevant markets.

84. CSW Power Marketing, Inc., before the Federal Energy Regulatory Commission, Docket No.ER97-1238-000 (1997) on behalf of the Transmission Dependent Utility Systems, re market power in relevant markets.

85. Central Hudson Gas & Electric Corporation *et al.*, before the New York Public Service Commission, Case Nos. 96-E-0891, 96-E-0897, 96-E-0898, 96-E-0900, 96-E-0909 (1997), on behalf of the Retail Council of New York, re stranded-cost recovery.

86. Central Hudson Gas & Electric Corporation, supplemental testimony, before the New York Public Service Commission, Case No. 96-E-0909 (1997) on behalf of the Retail Council of New York, re stranded-cost recovery.

87. Consolidated Edison Company of New York, Inc., supplemental testimony, before the New York Public Service Commission, Case No. 96-E-0897 (1997) on behalf of the Retail Council of New York, re stranded-cost recovery.

88. New York State Electric & Gas Corporation, supplemental testimony, before the New York Public Service Commission, Case No. 96-E-0891 (1997) on behalf of the Retail Council of New York, re stranded-cost recovery.

89. Rochester Gas and Electric Corporation, supplemental testimony, before the New York Public Service Commission, Case No. 96-E-0898 (1997) on behalf of the Retail Council of New York, re stranded-cost recovery.

90. Texas Utilities Electric Company, before the Public Utility Commission of Texas, Docket No. 15015 (1996), on behalf of Nucor Steel-Texas, re real-time electricity pricing.

91. Central Power and Light Company, before the Public Utility Commission of Texas, Docket No. 14965 (1996), on behalf of the Texas Retailers Association, re cost of service and rate design.

92. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 95-1076-E (1996), on behalf of Nucor Steel-Darlington, re integrated resource planning.

93. Texas Utilities Electric Company, before the Public Utility Commission of Texas, Docket No. 13575 (1995), on behalf of Nucor Steel-Texas, re integrated resource planning, DSM options, and real-time pricing.

94. Arkansas Power & Light Company, *et al.*, Notice of Inquiry to Consider Section 111 of the Energy Policy Act of 1992, before the Arkansas Public Service Commission, Docket No. 94-342-U (1995), Initial Comments on behalf of Nucor-Yamato Steel Company, re integrated resource planning standards.

95. Arkansas Power & Light Company, *et al.*, Notice of Inquiry to Consider Section 111 of the Energy Policy Act of 1992, before the Arkansas Public Service Commission, Docket No. 94-342-U (1995), Reply Comments on behalf of Nucor-Yamato Steel Company, re integrated resource planning standards.

96. Arkansas Power & Light Company, *et al.*, Notice of Inquiry to Consider Section 111 of the Energy Policy Act of 1992, before the Arkansas Public Service Commission, Docket No. 94-342-U (1995), Final Comments on behalf of Nucor-Yamato Steel Company, re integrated resource planning standards.

97. South Carolina Pipeline Corporation, before the South Carolina Public Service Commission, Docket No. 94-202-G (1995), on behalf of Nucor Steel, re integrated resource planning and rate caps.

98. Gulf States Utilities Company, before the United States Court of Federal Claims, *Gulf States Utilities Company v. the United States*, Docket No. 91-1118C (1994, 1995), on behalf of the United States, re electricity rate and contract dispute litigation.

99. American Electric Power Corporation, before the Federal Energy Regulatory Commission, Docket No. ER93-540-000 (1994), on behalf of DC Tie, Inc., re costing and pricing electricity transmission services.

100. Texas Utilities Electric Company, before the Public Utility Commission of Texas, Docket No. 13100 (1994), on behalf of Nucor Steel-Texas, re real-time electricity pricing.

101. Carolina Power & Light Company, *et al.*, Proposed Regulation Governing the Recovery of Fuel Costs by Electric Utilities, before the South Carolina Public Service Commission, Docket No. 93-238-E (1994), on behalf of Nucor Steel-Darlington, re fuel-cost recovery.

102. Southern Natural Gas Company, before the Federal Energy Regulatory Commission, Docket No. RP93-15-000 (1993-1995), on behalf of Nucor Steel-Darlington, re costing and pricing natural gas transportation services.

103. West Penn Power Company, *et al.*, v. State Tax Department of West Virginia, *et al.*, Civil Action No. 89-C-3056 (1993), before the Circuit Court of Kanawha County, West Virginia, on behalf of the West Virginia Department of Tax and Revenue, re electricity generation tax.

104. Carolina Power & Light Company, *et al.*, Proceeding Regarding Consideration of Certain Standards Pertaining to Wholesale Power Purchases Pursuant to Section 712 of the 1992 Energy Policy Act, before the South Carolina Public Service Commission, Docket No. 92-231-E (1993), on behalf of Nucor Steel-Darlington, re Section 712 regulations.

105. Mountain Fuel Supply Company, before the Public Service Commission of Utah, Docket No. 93-057-01 (1993), on behalf of Nucor Steel-Utah, re costing and pricing retail natural gas firm, interruptible, and transportation services.

106. Texas Utilities Electric Company, before the Public Utility Commission of Texas, Docket No. 11735 (1993), on behalf of the Texas Retailers Association, re retail cost-of-service and rate design.

107. Virginia Electric and Power Company, before the Virginia State Corporation Commission, Case No. PUE920041 (1993), on behalf of Philip Morris USA, re cost of service and retail rate design.

108. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 92-209-E (1992), on behalf of Nucor Steel-Darlington.

109. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-17282, Rate Design (1992), on behalf of the Department of Energy, Strategic Petroleum Reserve.

110. Georgia Power Company, before the Georgia Public Service Commission, Docket Nos. 4091-U and 4146-U (1992), on behalf of Amicalola Electric Membership Corporation.

111. PacifiCorp, Inc., before the Federal Energy Regulatory Commission, Docket No. EC88-2-007 (1992), on behalf of Nucor Steel-Utah.

112. South Carolina Pipeline Corporation, before the South Carolina Public Service Commission, Docket No. 90-452-G (1991), on behalf of Nucor Steel-Darlington.

113. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 91-4-E, 1991 Fall Hearing, on behalf of Nucor Steel-Darlington.

114. Sonat, Inc., and North Carolina Natural Gas Corporation, before the North Carolina Utilities Commission, Docket No. G-21, Sub 291 (1991), on behalf of Nucor Corporation, Inc.

115. Northern States Power Company, before the Minnesota Public Utilities Commission, Docket No. E002/GR-91-001 (1991), on behalf of North Star Steel-Minnesota.

116. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-17282, Phase IV-Rate Design (1991), on behalf of the Department of Energy, Strategic Petroleum Reserve.

117. Houston Lighting & Power Company, before the Public Utility Commission of Texas, Docket No. 9850 (1990), on behalf of the Department of Energy, Strategic Petroleum Reserve.

118. General Services Administration, before the United States General Accounting Office, Contract Award Protest (1990), Solicitation No. GS-00P-AC87-91, Contract No. GS-00D-89-B5D-0032, on behalf of Satilla Rural Electric Membership Corporation, re cost of service and rate design.

119. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 90-4-E (1990 Fall Hearing), on behalf of Nucor Steel-Darlington, re fuel-cost recovery.

120. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-17282, Phase III-Rate Design (1990), on behalf of the Department of Energy, Strategic Petroleum Reserve, re cost of service and rate design.

121. Atlanta Gas Light Company, before the Georgia Public Service Commission, Docket No. 3923-U (1990), on behalf of Herbert G. Burris and Oglethorpe Power Corporation, re anticompetitive pricing schemes.

122. Ohio Edison Company, before the Ohio Public Utilities Commission, Case No. 89-1001-EL-AIR (1990), on behalf of North Star Steel-Ohio, re cost of service and rate design.

123. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-17282, Phase III-Cost of Service/Revenue Spread (1989), on behalf of the Department of Energy, Strategic Petroleum Reserve.

124. Northern States Power Company, before the Minnesota Public Utilities Commission, Docket No. E002/GR-89-865 (1989), on behalf of North Star Steel-Minnesota.

125. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-17282, Phase III-Rate Design (1989), on behalf of the Department of Energy, Strategic Petroleum Reserve.

126. Utah Power & Light Company, before the Utah Public Service Commission, Case No. 89-039-10 (1989), on behalf of Nucor Steel-Utah and Vulcraft, a division of Nucor Steel.

127. Soyland Power Cooperative, Inc. v. Central Illinois Public Service Company, Docket No. EL89-30-000 (1989), before the Federal Energy Regulatory Commission, on behalf of Soyland Power Cooperative, Inc., re wholesale contract pricing provisions

128. Gulf States Utilities Company, before the Public Utility Commission of Texas, Docket No. 8702 (1989), on behalf of the Department of Energy, Strategic Petroleum Reserve.

129. Houston Lighting and Power Company, before the Public Utility Commission of Texas, Docket No. 8425 (1989), on behalf of the Department of Energy, Strategic Petroleum Reserve.

130. Northern Illinois Gas Company, before the Illinois Commerce Commission, Docket No. 88-0277 (1989), on behalf of the Coalition for Fair and Equitable Transportation, re retail gas transportation rates.

131. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 79-7-E, 1988 Fall Hearing, on behalf of Nucor Steel-Darlington, re fuel-cost recovery.

132. Potomac Electric Power Company, before the District of Columbia Public Service Commission, Formal Case No. 869 (1988), on behalf of Peoples Drug Stores, Inc., re cost of service and rate design.

133. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 88-11-E (1988), on behalf of Nucor Steel-Darlington.

134. Northern States Power Company, before the Minnesota Public Utilities Commission, Docket No. E-002/GR-87-670 (1988), on behalf of the Metalcasters of Minnesota.

135. Ohio Edison Company, before the Ohio Public Utilities Commission, Case No. 87-689-EL-AIR (1987), on behalf of North Star Steel-Ohio.

136. Carolina Power & Light Company, before the South Carolina Public Service Commission, Docket No. 87-7-E (1987), on behalf of Nucor Steel-Darlington.

137. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-17282, Phase I (1987), on behalf of the Strategic Petroleum Reserve.

138. Gulf States Utilities Company, before the Public Utility Commission of Texas, Docket No. 7195 (1987), on behalf of the Strategic Petroleum Reserve.

139. Gulf States Utilities Company, before the Federal Energy Regulatory Commission, Docket No. ER86-558-006 (1987), on behalf of Sam Rayburn G&T Cooperative.

140. Utah Power & Light Company, before the Utah Public Service Commission, Case No. 85-035-06 (1986), on behalf of the U.S. Air Force.

141. Houston Lighting & Power Company, before the Public Utility Commission of Texas, Docket No. 6765 (1986), on behalf of the Strategic Petroleum Reserve.

142. Central Maine Power Company, before the Maine Public Utilities Commission, Docket No. 85-212 (1986), on behalf of the U.S. Air Force.

143. Gulf States Utilities Company, before the Public Utility Commission of Texas, Docket Nos. 6477 and 6525 (1985), on behalf of North Star Steel-Texas.

144. Ohio Edison Company, before the Ohio Public Utilities Commission, Docket No. 84-1359-EL-AIR (1985), on behalf of North Star Steel-Ohio.

145. Utah Power & Light Company, before the Utah Public Service Commission, Case No. 84-035-01 (1985), on behalf of the U.S. Air Force.

146. Central Vermont Public Service Corporation, before the Vermont Public Service Board, Docket No. 4782 (1984), on behalf of Central Vermont Public Service Corporation.

147. Gulf States Utilities Company, before the Louisiana Public Service Commission, Docket No. U-15641 (1983), on behalf of the Strategic Petroleum Reserve.

148. Southwestern Power Administration, before the Federal Energy Regulatory Commission, Rate Order SWPA-9 (1982), on behalf of the Department of Defense.

149. Public Service Company of Oklahoma, before the Federal Energy Regulatory Commission, Docket Nos. ER82-80-000 and ER82-389-000 (1982), on behalf of the Department of Defense.

150. Central Maine Power Company, before the Maine Public Utilities Commission, Docket No. 80-66 (1981), on behalf of the Commission Staff.

151. Bangor Hydro-Electric Company, before the Maine Public Utilities Commission, Docket No. 80-108 (1981), on behalf of the Commission Staff.

152. Oklahoma Gas & Electric, before the Oklahoma Corporation Commission, Docket No. 27275 (1981), on behalf of the Commission Staff.

153. Green Mountain Power, before the Vermont Public Service Board, Docket No. 4418 (1980), on behalf of the PSB Staff.

154. Williams Pipe Line, before the Federal Energy Regulatory Commission, Docket No. OR79-1 (1979), on behalf of Mapco, Inc.

155. Boston Edison Company, before the Massachusetts Department of Public Utilities, Docket No. 19494 (1978), on behalf of Boston Edison Company.

156. Duke Power Company, before the North Carolina Utilities Commission, Docket No. E-7, Sub 173, on behalf of the Commission Staff.

157. Duke Power Company, before the North Carolina Utilities Commission, Docket No. E-100, Sub 32, on behalf of the Commission Staff.

158. Virginia Electric & Power Company, before the North Carolina Utilities Commission, Docket No. E-22, Sub 203, on behalf of the Commission Staff.

159. Virginia Electric & Power Company, before the North Carolina Utilities Commission, Docket No. E-22, Sub 170, on behalf of the Commission Staff.

160. Southern Bell Telephone Company, before the North Carolina Utilities Commission, Docket No. P-5, Sub 48, on behalf of the Commission Staff.

161. Western Carolina Telephone Company, before the North Carolina Utilities Commission, Docket No. P-58, Sub 93, on behalf of the Commission Staff.

162. Natural Gas Ratemaking, before the North Carolina Utilities Commission, Docket No. G-100, Sub 29, on behalf of the Commission Staff.

163. General Telephone Company of the Southeast, before the North Carolina Utilities Commission, Docket No. P-19, Sub 163, on behalf of the Commission Staff.

164. Carolina Power and Light Company, before the North Carolina Utilities Commission, Docket No. E-2, Sub 264, on behalf of the Commission Staff.

165. Carolina Power and Light Company, before the North Carolina Utilities Commission, Docket No. E-2, Sub 297, on behalf of the Commission Staff.

166. Duke Power Company, *et al.*, Investigation of Peak-Load Pricing, before the North Carolina Utilities Commission, Docket No. E-100, Sub 21, on behalf of the Commission Staff.

167. Investigation of Intrastate Long Distance Rates, before the North Carolina Utilities Commission, Docket No. P-100, Sub 45, on behalf of the Commission Staff.

COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION

CASE NO. 2009-00549

APPLICATION OF
LOUISVILLE GAS AND ELECTRIC COMPANY
FOR AN ADJUSTMENT OF BASE RATES

EXHIBITS TO THE DIRECT TESTIMONY OF DENNIS W. GOINS ON BEHALF OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

April 22, 2010

EXHIBIT DWG-1

SELECTED LG&E RESPONSES TO REQUESTS FOR INFORMATION REGARDING CURTAILMENT SERVICE RATE OPTIONS

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 1

Responding Witness: Lonnie E. Bellar/William Steven Seelye/Counsel

Q-1. Referring to the proposed Curtailable Service Rider CSR:

a. Please provide all workpapers, studies, analyses, and documents supporting and/or underlying the development of the proposed rider.

b. Provide all studies and/or analyses that LG&E conducted concerning expected customer acceptance of and willingness to receive service under the proposed rider.

c. Identify and provide all documents provided to and correspondence with existing and potential interruptible customers related to the development, implementation, and operation of the proposed CSR rider.

d. Identify and provide all alternatives to Rider CSR as proposed that LG&E considered but rejected.

A-1. a. No studies were performed. The new CSR is the result of internal discussion to simplify the process for all existing participating industrials. Please see the response to AG-1 Question No. 239.

b. See response to (a.) above.

c. See the response to KPSC-2 Question No. 97.

d. All decisions regarding which adjustments to include in the application in this proceeding were made in consultation with legal counsel. Any response to this question necessarily requires the Company to reveal the contents of communications with counsel and the mental impressions of counsel, which information is protected from disclosure by the attorney-client privilege and the work product doctrine.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 2

Responding Witness: Robert M. Conroy

Q-2. Referring to existing Riders CSR1, CSR2, and CSR3:

a. For each customer (identified only by reference number) served under one of these riders, identify the applicable rider and the total MW of curtailable/interruptible load under contract.

b. State the number of months in which each customer in subpart (a) above has been continuously served under the existing rider or its predecessor.

c. For each customer identified in the subpart (a) above, provide the customer's firm contract demand.

A-2. a. Please see the response to AG-1 Question No. 236, AG-1 Question No. 237 and AG-1 Question No. 238.

b. The customer (reference number 2) served under CSR1 at primary voltage has been a customer under that rider since June 1985. The customer (reference number 1) served under CSR1 at transmission voltage has been a customer under that rider since May 1994.

c. See response to (a.) above.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 3

Responding Witness: Lonnie E. Bellar/William Steven Seelye

Q-3. Referring to existing Riders CSR1, CSR2, and CSR3:

a. For each customer (identified only by reference number) served under one of these riders, identify the date, time, and duration of each curtailment called by LG&E in the past 60 months?

b. For each curtailment referenced in the response to subpart (a) above, specify whether the curtailment was an emergency or a buy-through event, identify the MW of load curtailment requested, and identify the MW of load that failed to comply with the curtailment request.

c. For each buy-through curtailment identified in the response to subpart (b) above, specify whether the customer bought through the curtailment, the amount of buy-through energy purchased, the price paid for such buy-through energy, and the source (system supply or market) of the buy-through price.

A-3. a. See attachment for details of curtailments for the past 5 years for both LG&E and KU.

b. "Emergency" does not apply to the CSRs. See attached. There were no failures to comply during the test year.

c. See attached. It is the operational practice to use the market as the source of buy through pricing.

Louisville Gas and Electric Company
Case No 2009-00549
Detailed Curtailment Data

Reference #	*Start Date/Time*	*Offer Price*	*KW Hrs Purchased*	*Offer Accepted*	*Hours*	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
1	1/8/2005 9:45 AM	N/A		N/A	2 75	Curtailment	Contracted amount	
1	1/10/2005 7:00 AM	N/A		N/A	3 00	Curtailment	Contracted amount	
1	1/11/2005 7:30 AM	N/A		N/A	1 50	Curtailment	Contracted amount	
1	1/14/2005 7:30 AM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	1/14/2005 7:30 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
2	1/14/2005 8:00 AM	65 00	20,000 00	YES	3 00	Buy-through	Contracted amount	
2	1/14/2005 11:00 AM	55 00	20,000 00	YES	3 00	Buy-through	Contracted amount	
1	1/17/2005 8:00 AM	N/A		N/A	0 83	Curtailment	Contracted amount	
4	1/17/2005 9:00 AM	95 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
4	1/17/2005 11:00 AM	85 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
4	1/17/2005 1:00 PM	75 00	3,600 00	YES	4 00	Buy-through	Contracted amount	
4	1/18/2005 9:00 AM	95 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
4	1/18/2005 11:00 AM	75 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
4	1/18/2005 12:00 PM	70 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
4	1/18/2005 1:00 PM	60 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
1	1/19/2005 12:15 PM	N/A		N/A	1 33	Curtailment	Contracted amount	
3	1/19/2005 12:20 PM	N/A		N/A	2 17	Curtailment	Contracted amount	
1	1/20/2005 7:35 AM	N/A		N/A	1 42	Curtailment	Contracted amount	
4	1/20/2005 9:00 AM	75 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
4	1/20/2005 10:00 AM	60 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
1	1/21/2005 7:30 AM	N/A		N/A	1 33	Curtailment	Contracted amount	
1	1/22/2005 11:05 AM	N/A		N/A	1 08	Curtailment	Contracted amount	
1	1/22/2005 6:30 PM	N/A		N/A	4 33	Curtailment	Contracted amount	
1	1/23/2005 6:53 PM	N/A		N/A	3 95	Curtailment	Contracted amount	
4	1/24/2005 9:00 AM	100 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
4	1/24/2005 10:00 AM	80 00	3,600 00	YES	3 00	Buy-through	Contracted amount	
4	1/24/2005 1:00 PM	60 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
4	1/27/2005 9:00 AM	75 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
4	1/27/2005 11:00 AM	55 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
3	1/27/2005 6:41 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
1	1/27/2005 6:50 PM	N/A		N/A	0 50	Curtailment	Contracted amount	
1	1/28/2005 7:13 AM	125 00	0 00	NO	4 45	Buy-through	Contracted amount	
3	1/28/2005 8:06 AM	N/A		N/A	3 23	Curtailment	Contracted amount	
3	1/28/2005 3:20 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
1	2/2/2005 7:15 AM	N/A		N/A	2 00	Curtailment	Contracted amount	
2	2/10/2005 7:30 AM	75 00	20,000 00	YES	1 50	Buy-through	Contracted amount	
2	2/10/2005 9:00 AM	70 00	20,000 00	YES	1 00	Buy-through	Contracted amount	
4	2/10/2005 9:00 AM	70 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
2	2/10/2005 10:00 AM	55 00	20,000 00	YES	3 00	Buy-through	Contracted amount	
4	2/10/2005 10:00 AM	55 00	3,600 00	YES	3 00	Buy-through	Contracted amount	
3	2/10/2005 10:30 AM	N/A		N/A	3 53	Curtailment	Contracted amount	
1	2/10/2005 10:35 AM	N/A		N/A	1 42	Curtailment	Contracted amount	
1	2/10/2005 12:00 PM	55 00	30,000 00	YES	1 00	Buy-through	Contracted amount	
2	2/11/2005 8:00 AM	69 00	21,000 00	YES	2 00	Buy-through	Contracted amount	
4	2/11/2005 9:00 AM	69 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
3	2/14/2005 9:35 AM	N/A		N/A	5 08	Curtailment	Contracted amount	
1	2/15/2005 7:30 PM	55 00	30,000 00	YES	1 50	Buy-through	Contracted amount	
3	2/17/2005 6:30 PM	N/A		N/A	4 25	Curtailment	Contracted amount	
1	2/17/2005 7:15 PM	75 00	30,000 00	YES	3 00	Buy-through	Contracted amount	
2	2/18/2005 7:00 AM	80 00	19,000 00	YES	4 00	Buy-through	Contracted amount	
1	2/18/2005 8:00 AM	N/A		N/A	3 17	Curtailment	Contracted amount	
3	2/18/2005 8:00 AM	N/A		N/A	2 25	Curtailment	Contracted amount	
4	2/18/2005 9:00 AM	80 00	3,600 00	YES	2 00	Buy-through	Contracted amount	
3	2/18/2005 7:30 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	2/21/2005 11:00 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
1	2/23/2005 8:00 AM	55 00	30,000 00	YES	2 00	Buy-through	Contracted amount	
2	2/23/2005 8:00 AM	55 00	20,000 00	YES	2 00	Buy-through	Contracted amount	
4	2/23/2005 9:00 AM	55 00	3,600 00	YES	1 25	Buy-through	Contracted amount	
2	2/24/2005 7:00 AM	70 00	20,000 00	YES	7 00	Buy-through	Contracted amount	
1	2/24/2005 7:30 AM	70 00	30,000 00	YES	12 00	Buy-through	Contracted amount	
4	2/24/2005 9:00 AM	70 00	3,600 00	YES	8 00	Buy-through	Contracted amount	
2	2/24/2005 2:00 PM	70 00	19,000 00	YES	6 00	Buy-through	Contracted amount	
2	2/25/2005 7:00 AM	80 00	15,000 00	YES	2 00	Buy-through	Contracted amount	
2	2/25/2005 9:00 AM	60 00	15,000 00	YES	1 00	Buy-through	Contracted amount	
4	2/25/2005 9:00 AM	60 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
2	2/25/2005 10:00 AM	55 00	15,000 00	YES	1 00	Buy-through	Contracted amount	
4	2/25/2005 10:00 AM	55 00	3,600 00	YES	1 00	Buy-through	Contracted amount	
3	2/25/2005 7:21 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
1	3/1/2005 8:00 AM	75 00		NO	2 00	Buy-through	Contracted amount	
2	3/1/2005 8:00 AM	75 00	10,000 00	YES	2 00	Buy-through	Contracted amount	
1	3/2/2005 7:45 AM	80 00		NO	1 25	Buy-through	Contracted amount	
2	3/2/2005 7:45 AM	80 00	19,000 00	YES	1 25	Buy-through	Contracted amount	
3	3/2/2005 7:10 PM	N/A		N/A	1 67	Curtailment	Contracted amount	
3	3/3/2005 8:00 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
2	3/4/2005 7:00 AM	80 00	20,000 00	YES	4 75	Buy-through	Contracted amount	
1	3/4/2005 7:15 AM	80 00		NO	4 50	Buy-through	Contracted amount	

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Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	*Curtailment or Buy-through* Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
4	3/4/2005 9:00 AM	80 00	3,600 00	YES	2 75	Buy-through	Contracted amount	
3	3/4/2005 10:05 AM	N/A		N/A	2 58	Curtailment	Contracted amount	
3	3/8/2005 6:40 PM	N/A		N/A	2 08	Curtailment	Contracted amount	
1	3/9/2005 7:15 AM	80 00		NO	1 75	Buy-through	Contracted amount	
2	3/9/2005 7:15 AM	80 00	21,000 00	YES	1 75	Buy-through	Contracted amount	
2	3/9/2005 9:00 AM	70 00	21,000 00	YES	1 00	Buy-through	Contracted amount	
3	3/9/2005 6:40 PM	N/A		N/A	2 83	Curtailment	Contracted amount	
1	3/10/2005 7:20 AM	85 00		NO	2 17	Buy-through	Contracted amount	
3	3/10/2005 2:55 PM	N/A		N/A	6 00	Curtailment	Contracted amount	
3	3/11/2005 8:55 AM	N/A		N/A	6 08	Curtailment	Contracted amount	
3	3/11/2005 8:01 PM	N/A		N/A	1 73	Curtailment	Contracted amount	
1	3/14/2005 7:15 AM	82 00		NO	3 00	Buy-through	Contracted amount	
2	3/14/2005 7:15 AM	82 00	15,000 00	YES	2 75	Buy-through	Contracted amount	
2	3/14/2005 10:00 AM	60 00	15,000 00	YES	1 00	Buy-through	Contracted amount	
3	3/16/2005 8:10 AM	N/A		N/A	6 42	Curtailment	Contracted amount	
2	3/16/2005 10:30 AM	81 00	13,000 00	YES	5 00	Buy-through	Contracted amount	
4	3/16/2005 10:30 AM	81 00	3,600 00	YES	5 00	Buy-through	Contracted amount	
3	3/16/2005 6:05 PM	N/A		N/A	2 83	Curtailment	Contracted amount	
3	3/17/2005 2:10 PM	N/A		N/A	0 83	Curtailment	Contracted amount	
1	3/18/2005 8:15 AM	81 00		NO	1 25	Buy-through	Contracted amount	
2	3/18/2005 8:15 AM	81 00	20,000 00	YES	1 25	Buy-through	Contracted amount	
1	3/21/2005 7:15 AM	81 00		NO	3 50	Buy-through	Contracted amount	
2	3/21/2005 7:15 AM	81 00	21,000 00	YES	3 50	Buy-through	Contracted amount	
3	3/21/2005 2:30 PM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	3/22/2005 10:40 AM	N/A		N/A	1 42	Curtailment	Contracted amount	
1	3/24/2005 8:00 AM	67 00	30,000 00	YES	2 00	Buy-through	Contracted amount	
2	3/24/2005 8:15 AM	67 00	20,000 00	YES	1 75	Buy-through	Contracted amount	
1	3/24/2005 10:00 AM	55 00	30,000 00	YES	1 00	Buy-through	Contracted amount	
2	3/24/2005 10:00 AM	55 00	20,000 00	YES	1 00	Buy-through	Contracted amount	
3	3/25/2005 8:30 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	3/28/2005 7:20 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	3/29/2005 7:20 PM	N/A		N/A	1 97	Curtailment	Contracted amount	
3	3/31/2005 9:45 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
4	6/6/2005 10:00 AM	80 00		NO	6 00	Buy-through	Contracted amount	
2	6/6/2005 11:00 AM	80 00	15,000 00	YES	6 00	Buy-through	Contracted amount	
4	6/10/2005 11:00 AM	133 00		NO	5 00	Buy-through	Contracted amount	
2	6/10/2005 12:00 PM	133 00	10,000 00	YES	6 00	Buy-through	Contracted amount	
2	6/22/2005 12:00 PM	127 00	22,000 00	YES	7 00	Buy-through	Contracted amount	
4	6/22/2005 12:00 PM	127 00	0 00	NO	4 00	Buy-through	Contracted amount	
2	6/23/2005 12:00 PM	127 00	19,500 00	YES	7 00	Buy-through	Contracted amount	
4	6/23/2005 12:00 PM	127 00	0 00	NO	4 00	Buy-through	Contracted amount	
2	6/24/2005 12:00 PM	129 00	21,000 00	YES	7 00	Buy-through	Contracted amount	
4	6/24/2005 12:00 PM	129 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	6/27/2005 11:00 AM	126 00	1,000 00	YES	5 50	Buy-through	Contracted amount	
2	6/27/2005 12:00 PM	126 00	21,000 00	YES	4 50	Buy-through	Contracted amount	
4	6/27/2005 12:00 PM	126 00	3,100 00	YES	4 00	Buy-through	Contracted amount	
3	6/27/2005 2:00 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
1	6/27/2005 4:30 PM	180 00	1,000 00	YES	2 50	Buy-through	Contracted amount	
2	6/27/2005 4:30 PM	180 00	21,000 00	YES	2 50	Buy-through	Contracted amount	
4	6/28/2005 12:00 PM	130 00	3,100 00	YES	4 00	Buy-through	Contracted amount	
1	6/28/2005 1:00 PM	130 00	30,000 00	YES	6 00	Buy-through	Contracted amount	
2	6/28/2005 1:00 PM	130 00	20,000 00	YES	6 00	Buy-through	Contracted amount	
3	6/28/2005 2:45 PM	N/A		N/A	2.00	Curtailment	Contracted amount	
1	6/29/2005 12:00 PM	158 00	28,000 00	YES	6 00	Buy-through	Contracted amount	
2	6/29/2005 12:00 PM	158 00	11,000 00	YES	3 00	Buy-through	Contracted amount	
4	6/29/2005 12:00 PM	158 00	0 00	NO	5 00	Buy-through	Contracted amount	
2	6/29/2005 3:00 PM	158 00	20,000 00	YES	3 00	Buy-through	Contracted amount	
1	6/30/2005 12:00 PM	155 00	0 00	NO	7 00	Buy-through	Contracted amount	
2	6/30/2005 12:00 PM	155 00	21,000 00	YES	7 00	Buy-through	Contracted amount	
4	6/30/2005 12:00 PM	155 00	0 00	NO	5 00	Buy-through	Contracted amount	
3	6/30/2005 2:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
4	7/5/2005 12:00 PM	154 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	7/5/2005 1:00 PM	154 00		NO	5 00	Buy-through	Contracted amount	
2	7/5/2005 1:00 PM	154 00	20,000 00	YES	5.00	Buy-through	Contracted amount	
4	7/6/2005 12:00 PM	154 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	7/6/2005 1:00 PM	154 00	28,000 00	YES	5 00	Buy-through	Contracted amount	
2	7/6/2005 1:00 PM	154 00	21,500 00	YES	5 00	Buy-through	Contracted amount	
4	7/7/2005 1:00 PM	154 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	7/7/2005 2:00 PM	154 00		NO	4 00	Buy-through	Contracted amount	
2	7/7/2005 2:00 PM	154 00	20,500 00	YES	4 00	Buy-through	Contracted amount	
1	7/11/2005 2:00 PM	154 00	0 00	NO	4 00	Buy-through	Contracted amount	
2	7/11/2005 2:00 PM	154 00	19,000 00	YES	4 00	Buy-through	Contracted amount	
1	7/15/2005 1:00 PM	154 00	0 00	NO	4 00	Buy-through	Contracted amount	
2	7/15/2005 1:00 PM	154 00	17,000 00	YES	4 00	Buy-through	Contracted amount	
4	7/15/2005 1:00 PM	154 00	0 00	NO	3 00	Buy-through	Contracted amount	
4	7/18/2005 12:00 PM	159 00	0 00	NO	4 00	Buy-through	Contracted amount	

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Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
1	7/18/2005 1:00 PM	159 00	0 00	NO	5 00	Buy-through	Contracted amount	
2	7/18/2005 1:00 PM	159 00	18,000 00	YES	5 00	Buy-through	Contracted amount	
1	8/2/2005 1:30 PM	223 00		NO	6 00	Buy-through	Contracted amount	
1	8/3/2005 1:00 PM			NO	5 00	Buy-through	Contracted amount	
2	8/3/2005 1:00 PM		17,000 00	YES	5 00	Buy-through	Contracted amount	
4	8/3/2005 1:00 PM		0 00	NO	3 00	Buy-through	Contracted amount	
3	8/3/2005 1:30 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
4	8/4/2005 12:30 PM		0 00	NO	4 00	Buy-through	Contracted amount	
1	8/4/2005 1:00 PM			NO	5 00	Buy-through	Contracted amount	
2	8/4/2005 1:00 PM		18,000 00	YES	5 00	Buy-through	Contracted amount	
4	8/11/2005 1:00 PM		0 00	NO	3 50	Buy-through	Contracted amount	
1	8/12/2005 1:00 PM		28,000 00	YES	4 00	Buy-through	Contracted amount	
2	8/12/2005 1:00 PM		20,000 00	YES	4 00	Buy-through	Contracted amount	
4	8/12/2005 1:00 PM		0 00	NO	3 50	Buy-through	Contracted amount	
3	9/12/2005 2:00 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
3	9/13/2005 4:00 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	9/14/2005 1:45 PM	N/A		N/A	2 60	Curtailment	Contracted amount	
3	9/22/2005 2:30 PM	N/A		N/A	3 25	Curtailment	Contracted amount	
3	9/23/2005 2:00 PM	N/A		N/A	2 25	Curtailment	Contracted amount	
3	10/3/2005 1:00 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
3	10/4/2005 1:35 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
2	11/22/2005 4:00 PM	80 00	19,000 00	YES	1 00	Buy-through	Contracted amount	
3	1/17/2006 2:00 PM	N/A		N/A	6 50	Curtailment	Contracted amount	
3	1/18/2006 8:35 AM	N/A		N/A	3 17	Curtailment	Contracted amount	
3	1/19/2006 8:30 AM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	1/23/2006 7:45 PM	N/A		N/A	2 25	Curtailment	Contracted amount	
3	1/26/2006 8:05 AM	N/A		N/A	2 92	Curtailment	Contracted amount	
3	1/26/2006 7:30 PM	N/A		N/A	2 50	Curtailment	Contracted amount	
3	1/27/2006 8:00 AM	N/A		N/A	2 50	Curtailment	Contracted amount	
3	2/2/2006 7:00 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
3	2/6/2006 7:00 PM	N/A		N/A	2 75	Curtailment	Contracted amount	
3	2/7/2006 8:00 AM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	2/9/2006 8:00 AM	N/A		N/A	1 75	Curtailment	Contracted amount	
3	2/13/2006 8:45 AM	N/A		N/A	2 58	Curtailment	Contracted amount	
3	2/15/2006 7:00 PM	N/A		N/A	1 25	Curtailment	Contracted amount	
3	2/16/2006 7:10 PM	N/A		N/A	1 92	Curtailment	Contracted amount	
3	2/20/2006 10:35 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	2/20/2006 7:20 PM	N/A		N/A	1 92	Curtailment	Contracted amount	
3	2/24/2006 8:20 AM	N/A		N/A	1 75	Curtailment	Contracted amount	
3	3/3/2006 7:10 AM	N/A		N/A	0 25	Curtailment	Contracted amount	
3	3/3/2006 9:30 AM	N/A		N/A	2 50	Curtailment	Contracted amount	
3	3/6/2006 8:20 AM	N/A		N/A	5 50	Curtailment	Contracted amount	
3	3/6/2006 7:35 PM	N/A		N/A	1 67	Curtailment	Contracted amount	
3	3/7/2006 7:45 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	3/8/2006 10:20 AM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	3/8/2006 7:00 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	3/9/2006 7:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	3/13/2006 1:00 PM	N/A		N/A	1 75	Curtailment	Contracted amount	
3	3/15/2006 11:30 AM	N/A		N/A	2 50	Curtailment	Contracted amount	
3	3/17/2006 11:45 AM	N/A		N/A	2 08	Curtailment	Contracted amount	
3	3/20/2006 10:15 AM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	3/21/2006 8:15 AM	N/A		N/A	2 75	Curtailment	Contracted amount	
3	3/21/2006 7:30 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	3/22/2006 7:50 PM	N/A		N/A	1 17	Curtailment	Contracted amount	
3	3/27/2006 8:15 AM	N/A		N/A	1 75	Curtailment	Contracted amount	
3	6/21/2006 3:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	6/22/2006 3:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	7/13/2006 1:35 PM	N/A		N/A	1 58	Curtailment	Contracted amount	
3	7/17/2006 3:20 PM	N/A		N/A	2 67	Curtailment	Contracted amount	
3	7/18/2006 3:40 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	7/31/2006 3:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
1	8/1/2006 1:45 PM	N/A	0 00	N/A	4 75	Curtailment	Contracted amount	
2	8/1/2006 1:45 PM	N/A	0 00	N/A	4 75	Curtailment	Contracted amount	
4	8/1/2006 1:45 PM	N/A	0 00	N/A	4 75	Curtailment	Contracted amount	
3	8/1/2006 2:05 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
1	8/2/2006 12:00 PM	N/A	0 00	N/A	5 75	Curtailment	Contracted amount	
2	8/2/2006 12:00 PM	N/A	0 00	N/A	5 75	Curtailment	Contracted amount	
4	8/2/2006 12:00 PM	N/A	0 00	N/A	7 00	Curtailment	Contracted amount	
3	8/2/2006 2:00 PM	N/A		N/A	3 50	Curtailment	Contracted amount	
3	8/3/2006 2:30 PM	N/A		N/A	2 33	Curtailment	Contracted amount	
3	8/7/2006 1:30 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
3	9/5/2006 10:31 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	9/13/2006 1:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	9/14/2006 1:45 PM	N/A		N/A	1 25	Curtailment	Contracted amount	
3	9/19/2006 12:11 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	9/22/2006 7:30 PM	N/A		N/A	2 00	Curtailment	Contracted amount	

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Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
3	9/25/2006 7:15 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	9/26/2006 7:51 PM	N/A		N/A	1 15	Curtailment	Contracted amount	
3	9/27/2006 7:30 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	10/4/2006 9:36 AM	N/A		N/A	1 23	Curtailment	Contracted amount	
3	10/17/2006 10:30 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	10/20/2006 10:00 AM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	10/23/2006 10:10 AM	N/A		N/A	4 00	Curtailment	Contracted amount	
3	10/23/2006 6:53 PM	N/A		N/A	1 45	Curtailment	Contracted amount	
3	11/2/2006 6:54 PM	N/A		N/A	3 10	Curtailment	Contracted amount	
3	11/3/2006 12:00 PM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	11/9/2006 11:30 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	11/9/2006 6:30 PM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	11/10/2006 6:27 PM	N/A		N/A	1 27	Curtailment	Contracted amount	
3	11/13/2006 6:15 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	11/15/2006 10:05 AM	N/A		N/A	0 92	Curtailment	Contracted amount	
3	11/16/2006 10:15 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	11/16/2006 5:50 PM	N/A		N/A	1 08	Curtailment	Contracted amount	
3	11/17/2006 1:34 PM	N/A		N/A	1 27	Curtailment	Contracted amount	
3	11/17/2006 6:01 PM	N/A		N/A	0 98	Curtailment	Contracted amount	
1	11/21/2006 8:00 AM	75 00	0 00	NO	1 58	Buy-through	Contracted amount	
3	11/27/2006 5:40 PM	N/A		N/A	1 33	Curtailment	Contracted amount	
3	11/28/2006 12:25 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	11/28/2006 8:00 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	12/5/2006 6:00 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	12/7/2006 6:30 PM	N/A		N/A	2 42	Curtailment	Contracted amount	
1	12/8/2006 7:32 AM	N/A	0 00	N/A	0 50	Curtailment	Contracted amount	
2	12/8/2006 7:33 AM	N/A	0 00	N/A	0 50	Curtailment	Contracted amount	
3	12/13/2006 6:15 PM	N/A		N/A	0 83	Curtailment	Contracted amount	
3	12/14/2006 6:00 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
3	1/1/2007 6:00 PM	N/A		N/A	1 33	Curtailment	Contracted amount	
3	1/4/2007 5:30 PM	N/A		N/A	2 50	Curtailment	Contracted amount	
3	1/16/2007 8:30 AM	N/A		N/A	0 83	Curtailment	Contracted amount	
3	1/16/2007 6:55 PM	N/A		N/A	0 83	Curtailment	Contracted amount	
3	1/17/2007 6:00 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	1/18/2007 6:15 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
3	1/22/2007 5:45 PM	N/A		N/A	3 75	Curtailment	Contracted amount	
3	1/24/2007 11:20 AM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	1/26/2007 8:25 AM	N/A		N/A	1 17	Curtailment	Contracted amount	
3	1/31/2007 9:15 AM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	2/5/2007 6:41 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	2/8/2007 8:25 PM	N/A		N/A	1 17	Curtailment	Contracted amount	
3	2/9/2007 6:45 PM	N/A		N/A	1 25	Curtailment	Contracted amount	
3	2/14/2007 6:10 PM	N/A		N/A	2 33	Curtailment	Contracted amount	
1	2/15/2007 1:00 PM	118 00	1,000 00	YES	6 00	Buy-through	Contracted amount	
4	2/15/2007 1:00 PM	118 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	2/15/2007 7:00 PM	118 00	10,000 00	YES	4 00	Buy-through	Contracted amount	
3	2/22/2007 7:06 PM	N/A		N/A	1 98	Curtailment	Contracted amount	
3	2/27/2007 9:00 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	2/28/2007 11:00 AM	N/A		N/A	0 50	Curtailment	Contracted amount	
3	3/1/2007 9:00 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	3/12/2007 7:10 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	3/13/2007 7:30 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	3/16/2007 7:30 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	3/20/2007 9:02 AM	N/A		N/A	1 05	Curtailment	Contracted amount	
3	3/21/2007 7:52 PM	N/A		N/A	1 47	Curtailment	Contracted amount	
3	3/22/2007 7:32 PM	N/A		N/A	0 97	Curtailment	Contracted amount	
3	3/23/2007 9:55 AM	N/A		N/A	3 58	Curtailment	Contracted amount	
1	3/27/2007 8:00 AM	56 00	30,000 00	YES	3 00	Buy-through	Contracted amount	
2	3/27/2007 8:00 AM	57 00	5,000 00	YES	3 00	Buy-through	Contracted amount	
3	3/28/2007 9:30 AM	N/A		N/A	1 25	Curtailment	Contracted amount	
3	4/16/2007 8:04 PM	N/A		N/A	0 43	Curtailment	Contracted amount	
3	4/30/2007 3:40 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
1	5/10/2007 1:00 PM	105 00	1,000 00	YES	8 00	Buy-through	Contracted amount	
2	5/10/2007 1:00 PM	105 00	20,000 00	YES	8 00	Buy-through	Contracted amount	
4	5/10/2007 1:00 PM	105 00	0 00	NO	8 00	Buy-through	Contracted amount	
3	7/3/2007 1:25 PM	N/A		N/A	4 58	Curtailment	Contracted amount	
1	7/6/2007 11:00 AM	85 00	1,000 00	YES	7 00	Buy-through	Contracted amount	
2	7/6/2007 11:00 AM	85 00	21,000 00	YES	7 00	Buy-through	Contracted amount	
3	7/6/2007 12:40 PM	N/A		N/A	0 58	Curtailment	Contracted amount	
1	7/9/2007 10:00 AM	125 00	1,000 00	YES	9 00	Buy-through	Contracted amount	
2	7/9/2007 10:00 AM	125 00	19,000 00	YES	1 00	Buy-through	Contracted amount	
4	7/9/2007 10:00 AM	140 00	0 00	NO	5 00	Buy-through	Contracted amount	
2	7/9/2007 11:00 AM	125 00	21,000 00	YES	8 00	Buy-through	Contracted amount	
3	7/9/2007 3:15 PM	N/A		N/A	2 75	Curtailment	Contracted amount	
1	7/10/2007 10:00 AM	112 00	1,000 00	YES	9 00	Buy-through	Contracted amount	
2	7/10/2007 10:00 AM	112 00	21,000 00	YES	9 00	Buy-through	Contracted amount	

Louisville Gas and Electric Company
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Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
4	7/10/2007 10:00 AM	93 00	0 00	NO	5 00	Buy-through	Contracted amount	
1	7/17/2007 1:00 PM	80 00	32,000 00	YES	6 00	Buy-through	Contracted amount	
2	7/17/2007 1:00 PM	80 00	20,000 00	YES	6 00	Buy-through	Contracted amount	
1	7/19/2007 10:00 AM	95 00	1,000 00	YES	7 00	Buy-through	Contracted amount	
2	7/19/2007 10:00 AM	95 00	20,000 00	YES	3 00	Buy-through	Contracted amount	
4	7/19/2007 10:00 AM	95 00	0 00	NO	5 00	Buy-through	Contracted amount	
2	7/19/2007 1:00 PM	95 00	14,000 00	YES	1 67	Buy-through	Contracted amount	
2	7/19/2007 2:40 PM	95 00	20,000 00	YES	2 33	Buy-through	Contracted amount	
3	8/3/2007 8:10 PM	N/A		N/A	0 83	Curtailment	Contracted amount	
4	8/6/2007 12:00 PM	107 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	8/6/2007 12:20 PM	N/A	0 00	N/A	4 67	Curtailment	Contracted amount	
2	8/6/2007 12:20 PM	N/A	0 00	N/A	4 67	Curtailment	Contracted amount	
1	8/7/2007 12:00 PM	142 00	1,000 00	YES	6 00	Buy-through	Contracted amount	
2	8/7/2007 12:00 PM	142 00	21,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/7/2007 12:00 PM	142 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	8/8/2007 12:00 PM	130 00	1,000 00	YES	6 00	Buy-through	Contracted amount	
2	8/8/2007 12:00 PM	130 00	21,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/8/2007 12:00 PM	130 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	8/9/2007 12:00 PM	163 00	0 00	NO	6 00	Buy-through	Contracted amount	
2	8/9/2007 12:00 PM	163 00	21,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/9/2007 12:00 PM	163 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	8/10/2007 12:00 PM	102 00	0 00	NO	6 00	Buy-through	Contracted amount	
2	8/10/2007 12:00 PM	102 00	21,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/10/2007 12:00 PM	102 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	8/13/2007 12:00 PM	115 00	1,000 00	YES	2 00	Buy-through	Contracted amount	
2	8/13/2007 12:00 PM	115 00	21,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/13/2007 12:00 PM	115 00	0 00	NO	3 00	Buy-through	Contracted amount	
1	8/13/2007 2:00 PM	115 00	1,000 00	YES	4 00	Buy-through	Contracted amount	
1	8/14/2007 11:00 AM	90 00	0 00	NO	9 00	Buy-through	Contracted amount	
2	8/14/2007 11:00 AM	90 00	21,000 00	YES	9 00	Buy-through	Contracted amount	
4	8/14/2007 11:00 AM	97 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	8/15/2007 12:15 PM	N/A	0 00	N/A	6 08	Curtailment	Contracted amount	
2	8/15/2007 12:15 PM	N/A	0 00	N/A	6 08	Curtailment	Contracted amount	
3	8/15/2007 12:15 PM	N/A		N/A	6 33	Curtailment	Contracted amount	
4	8/15/2007 12:15 PM	N/A	0 00	N/A	2 75	Curtailment	Contracted amount	
1	8/16/2007 12:00 PM	107 00	0 00	NO	6 75	Buy-through	Contracted amount	
2	8/16/2007 12:00 PM	107 00	15,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/16/2007 12:00 PM	107 00	0 00	NO	3 00	Buy-through	Contracted amount	
3	8/16/2007 5:32 PM	N/A		N/A	1 22	Curtailment	Contracted amount	
1	8/22/2007 2:00 PM	110 00	0 00	NO	5 00	Buy-through	Contracted amount	
2	8/22/2007 2:00 PM	110 00	13,000 00	YES	1 00	Buy-through	Contracted amount	
2	8/22/2007 3:00 PM	105 00	14,000 00	YES	1 00	Buy-through	Contracted amount	
2	8/22/2007 4:00 PM	102 00	14,000 00	YES	1 00	Buy-through	Contracted amount	
2	8/22/2007 5:00 PM	115 00	11,000 00	YES	1 00	Buy-through	Contracted amount	
2	8/22/2007 6:00 PM	110 00	11,000 00	YES	1 00	Buy-through	Contracted amount	
4	8/23/2007 11:00 AM	130 00	0 00	NO	9 00	Buy-through	Contracted amount	
1	8/23/2007 12:00 PM	130 00	0 00	NO	8 00	Buy-through	Contracted amount	
2	8/23/2007 12:00 PM	130 00	14,000 00	YES	8 00	Buy-through	Contracted amount	
1	8/24/2007 12:00 PM	100 00	0 00	NO	6 00	Buy-through	Contracted amount	
2	8/24/2007 12:00 PM	100 00	18,000 00	YES	6 00	Buy-through	Contracted amount	
4	8/24/2007 12:00 PM	100 00	0 00	NO	5 00	Buy-through	Contracted amount	
1	10/8/2007 1:40 PM	N/A	0 00	N/A	1 17	Curtailment	Contracted amount	
2	10/8/2007 1:40 PM	N/A	0 00	N/A	1 17	Curtailment	Contracted amount	
3	10/11/2007 6:54 PM	N/A		N/A	1 67	Curtailment	Contracted amount	
3	10/15/2007 6:20 PM	N/A		N/A	1 33	Curtailment	Contracted amount	
3	10/19/2007 6:40 PM	N/A		N/A	1 08	Curtailment	Contracted amount	
3	10/22/2007 11:30 AM	N/A		N/A	1 17	Curtailment	Contracted amount	
3	10/24/2007 3:30 PM	N/A		N/A	1 42	Curtailment	Contracted amount	
3	11/16/2007 7:15 PM	N/A		N/A	1 75	Curtailment	Contracted amount	
3	11/21/2007 10:30 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	11/27/2007 6:10 PM	N/A		N/A	1 83	Curtailment	Contracted amount	
3	11/28/2007 7:05 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	11/29/2007 6:50 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	12/11/2007 6:20 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	12/14/2007 5:45 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
3	1/10/2008 11:35 AM	N/A		N/A	1 67	Curtailment	Contracted amount	
3	1/15/2008 6:20 PM	N/A		N/A	0 83	Curtailment	Contracted amount	
3	1/23/2008 5:30 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	2/4/2008 10:52 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	2/6/2008 6:36 PM	N/A		N/A	0 57	Curtailment	Contracted amount	
3	2/8/2008 2:40 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	2/27/2008 6:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	3/17/2008 7:15 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
3	3/19/2008 8:09 PM	N/A		N/A	1 52	Curtailment	Contracted amount	
3	3/20/2008 7:48 PM	N/A		N/A	0 70	Curtailment	Contracted amount	
3	3/26/2008 8:00 AM	N/A		N/A	4 50	Curtailment	Contracted amount	

Louisville Gas and Electric Company
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Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
3	3/26/2008 2:10 PM	N/A		N/A	3 25	Curtailment	Contracted amount	
3	3/28/2008 7:42 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	3/31/2008 7:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	4/4/2008 8:47 PM	N/A		N/A	0 63	*Curtailment*	*Contracted amount*	
3	5/6/2008 8:20 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
4	6/9/2008 12:00 PM	160 00	0 00	NO	6 00	Buy-through	Contracted amount	
1	6/9/2008 12:00 PM	N/A	0 00	N/A	6 00	Curtailment	Contracted amount	
2	6/9/2008 12:00 PM	N/A	0 00	N/A	6 00	Curtailment	Contracted amount	
3	6/11/2008 4:15 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	7/21/2008 11:30 AM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	7/22/2008 12:32 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	7/29/2008 11:10 AM	N/A		N/A	1 33	Curtailment	Contracted amount	
1	7/29/2008 12:00 PM	150 00	1,000 00	YES	5 00	Buy-through	Contracted amount	
2	7/29/2008 12:00 PM	150 00	20,000 00	YES	5 00	Buy-through	Contracted amount	
4	7/29/2008 12:00 PM	150 00	3,000 00	YES	5 00	Buy-through	Contracted amount	
1	8/1/2008 11:00 AM	135 00	1,000 00	YES	2 00	Buy-through	Contracted amount	
2	8/1/2008 11:00 AM	135 00	20,000 00	YES	2 00	Buy-through	Contracted amount	
4	8/1/2008 11:00 AM	135 00	3,000 00	YES	2 00	Buy-through	Contracted amount	
1	8/1/2008 1:20 PM	N/A	0 00	N/A	0 67	Curtailment	Contracted amount	
2	8/1/2008 1:20 PM	N/A	0 00	N/A	0 67	Curtailment	Contracted amount	
4	8/1/2008 1:20 PM	N/A	0 00	N/A	4 67	Curtailment	Contracted amount	
1	8/1/2008 2:00 PM	160 00	1,000 00	YES	4 00	Buy-through	Contracted amount	
2	8/1/2008 2:00 PM	160 00	20,000 00	YES	4 00	Buy-through	Contracted amount	
1	8/4/2008 12:00 PM	115 00	1,000 00	YES	8 00	Buy-through	Contracted amount	
2	8/4/2008 12:00 PM	115 00	20,000 00	YES	8 00	Buy-through	Contracted amount	
4	8/4/2008 12:00 PM	115 00	3,000 00	YES	8 00	Buy-through	Contracted amount	
1	8/5/2008 11:00 AM	120 00	26,000 00	YES	8 00	Buy-through	Contracted amount	
2	8/5/2008 11:00 AM	120 00	21,000 00	YES	8 00	Buy-through	Contracted amount	
4	8/5/2008 11:00 AM	120 00	3,000 00	YES	8 00	Buy-through	Contracted amount	
1	8/6/2008 10:00 AM	115 00	1,000 00	YES	6 00	Buy-through	Contracted amount	
2	8/6/2008 10:00 AM	115 00	16,000 00	YES	6 00	Buy-through	Contracted amount	
3	8/6/2008 1:35 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
1	8/7/2008 10:00 AM	119 00	1,000 00	YES	6 00	Buy-through	Contracted amount	
2	8/7/2008 10:00 AM	119 00	20,000 00	YES	6 00	Buy-through	Contracted amount	
1	8/7/2008 11:00 AM	119 00	25,000 00	YES	5 00	Buy-through	Contracted amount	
1	8/20/2008 12:00 PM	78 00	26,000 00	YES	7 00	Buy-through	Contracted amount	
2	8/20/2008 12:00 PM	78 00	12,000 00	YES	7 00	Buy-through	Contracted amount	
4	8/20/2008 12:00 PM	78 00	3,000 00	YES	7 00	Buy-through	Contracted amount	
1	8/21/2008 11:00 AM	79 50	1,000 00	YES	7 00	Buy-through	Contracted amount	
2	8/21/2008 11:00 AM	79 50	18,000 00	YES	7 00	Buy-through	Contracted amount	
4	8/21/2008 11:00 AM	79 50	3,000 00	YES	7 00	Buy-through	Contracted amount	
1	9/2/2008 12:00 PM	120 00	26,000 00	YES	8 00	Buy-through	Contracted amount	
2	9/2/2008 12:00 PM	120 00	20,000 00	YES	8 00	Buy-through	Contracted amount	
4	9/2/2008 12:00 PM	120 00	0 00	NO	8 00	Buy-through	Contracted amount	
3	9/2/2008 2:50 PM	N/A		N/A	1 00	*Curtailment*	*Contracted amount*	
1	9/3/2008 12:00 PM	92 00	1,000 00	YES	8 00	Buy-through	Contracted amount	
2	9/3/2008 12:00 PM	92 00	21,000 00	YES	8 00	Buy-through	Contracted amount	
4	9/3/2008 12:00 PM	92 00	0 00	NO	8 00	Buy-through	Contracted amount	
3	9/3/2008 2:40 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	9/4/2008 7:17 PM	N/A		N/A	1 22	Curtailment	Contracted amount	
3	9/11/2008 11:40 AM	N/A		N/A	1 17	Curtailment	Contracted amount	
3	9/19/2008 12:45 PM	N/A		N/A	4 75	*Curtailment*	*Contracted amount*	
3	9/23/2008 7:45 PM	N/A		N/A	1 08	Curtailment	Contracted amount	
3	10/8/2008 9:25 AM	N/A		N/A	1 08	Curtailment	Contracted amount	
3	10/10/2008 6:55 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	10/13/2008 6:55 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	10/15/2008 2:15 PM	N/A		N/A	1 75	Curtailment	Contracted amount	
3	11/19/2008 5:30 PM	N/A		N/A	4 00	Curtailment	Contracted amount	
3	1/7/2009 5:42 PM	N/A		N/A	1 30	Curtailment	Contracted amount	
3	1/8/2009 8:10 AM	N/A		N/A	1 67	Curtailment	Contracted amount	
3	1/9/2009 8:00 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	1/12/2009 8:00 AM	N/A		N/A	0 60	Curtailment	Contracted amount	
3	1/13/2009 5:40 PM	N/A		N/A	1 42	Curtailment	Contracted amount	
1	1/15/2009 7:00 AM	70 00	30,000 00	YES	14 00	Buy-through	Contracted amount	
4	1/15/2009 7:00 AM	70 00	0 00	NO	14 00	Buy-through	Contracted amount	
3	1/15/2009 11:59 AM	N/A		N/A	2 52	Curtailment	Contracted amount	
1	1/16/2009 7:00 AM	70 00	30,000 00	YES	14 00	Buy-through	Contracted amount	
4	1/16/2009 7:00 AM	70 00	0 00	NO	14 00	Buy-through	Contracted amount	
3	1/22/2009 8:10 AM	N/A		N/A	1 58	Curtailment	Contracted amount	
3	1/23/2009 6:00 PM	N/A		N/A	1 25	Curtailment	Contracted amount	
3	2/4/2009 6:00 PM	N/A		N/A	4 00	Curtailment	Contracted amount	
3	2/16/2009 6:50 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	2/17/2009 8:00 AM	N/A		N/A	2 15	Curtailment	Contracted amount	
3	3/2/2009 8:00 AM	N/A		N/A	5 83	Curtailment	Contracted amount	
3	3/2/2009 5:30 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
3	3/3/2009 8:00 AM	N/A		N/A	5 00	Curtailment	Contracted amount	

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Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
3	3/11/2009 8:25 PM	N/A		N/A	1 17	Curtailment	Contracted amount	
3	3/12/2009 5:10 PM	N/A		N/A	3 08	Curtailment	Contracted amount	
3	5/19/2009 4:41 PM	N/A		N/A	0 50	Curtailment	Contracted amount	
1	6/2/2009 1:00 PM	44 00	20,000 00	YES	4 00	Buy-through	Contracted amount	
2	6/2/2009 1:00 PM	44 00	0 00	NO	4 00	Buy-through	Contracted amount	
4	6/2/2009 1:00 PM	44 00	0 00	NO	4 00	Buy-through	Contracted amount	
3	6/2/2009 1:20 PM	N/A		N/A	1 70	Curtailment	Contracted amount	
3	6/9/2009 1:40 PM	N/A		N/A	5 67	Curtailment	Contracted amount	
3	*6/12/2009 2:15 PM*	*N/A*		*N/A*	*2 70*	*Curtailment*	*Contracted amount*	
3	6/15/2009 12:00 PM	N/A		N/A	5 87	Curtailment	Contracted amount	
3	6/16/2009 12:35 PM	N/A		N/A	1 92	Curtailment	Contracted amount	
1	6/17/2009 1:00 PM	47 00	29,000 00	YES	4 00	Buy-through	Contracted amount	
4	6/17/2009 1:00 PM	0 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	6/23/2009 1:00 PM	62 00	28,000 00	YES	4 33	Buy-through	Contracted amount	
4	6/23/2009 1:00 PM	62 00	0 00	NO	5 00	Buy-through	Contracted amount	
1	6/24/2009 1:00 PM	68 00	0 00	NO	5 00	Buy-through	Contracted amount	
4	6/24/2009 1:00 PM	68 00	0 00	NO	5 00	Buy-through	Contracted amount	
1	6/25/2009 1:00 PM	62 00	28,000 00	YES	5 00	Buy-through	Contracted amount	
4	*6/25/2009 1:00 PM*	*62 00*	0 00	NO	5 00	Buy-through	Contracted amount	
3	6/30/2009 3:15 PM	N/A		N/A	2 75	Curtailment	Contracted amount	
3	6/30/2009 7:00 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
3	7/8/2009 11:41 AM	N/A		N/A	2 32	Curtailment	Contracted amount	
3	7/10/2009 3:30 PM	N/A		N/A	3 08	Curtailment	Contracted amount	
3	7/16/2009 3:50 PM	N/A		N/A	2 67	Curtailment	Contracted amount	
3	7/20/2009 6:15 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	*7/23/2009 3:00 PM*	*N/A*		*N/A*	*3 00*	*Curtailment*	*Contracted amount*	
3	7/24/2009 2:00 PM	N/A		N/A	1 50	Curtailment	Contracted amount	
3	8/5/2009 4:58 PM	N/A		N/A	1 62	Curtailment	Contracted amount	
3	8/7/2009 1:35 PM	N/A		N/A	1 42	Curtailment	Contracted amount	
3	8/10/2009 12:42 PM	N/A		N/A	1 63	Curtailment	Contracted amount	
1	8/10/2009 1:00 PM	52 00	30,000 00	YES	1 00	Buy-through	Contracted amount	
1	8/10/2009 2:00 PM	N/A	0 00	N/A	1 00	Curtailment	Contracted amount	
1	8/11/2009 11:00 AM	37 50	30,000 00	YES	2 50	Buy-through	Contracted amount	
3	8/11/2009 12:45 PM	N/A		N/A	3 00	Curtailment	Contracted amount	
1	8/11/2009 1:30 PM	N/A	0 00	N/A	3 00	Curtailment	Contracted amount	
3	8/11/2009 6:30 PM	N/A		N/A	2 50	Curtailment	Contracted amount	
1	8/12/2009 11:00 AM	36 50	30,000 00	YES	6 00	Buy-through	Contracted amount	
3	8/12/2009 2:02 PM	N/A		N/A	5 55	Curtailment	Contracted amount	
1	8/13/2009 1:00 PM	36 00	30,000 00	YES	1 00	Buy-through	Contracted amount	
3	8/13/2009 1:55 PM	N/A		N/A	5 58	Curtailment	Contracted amount	
1	8/13/2009 2:00 PM	44 00	30,000 00	YES	3 00	Buy-through	Contracted amount	
1	8/17/2009 10:00 AM	53 00	0 00	NO	1 00	Buy-through	Contracted amount	
4	*8/17/2009 10:00 AM*	*53 00*	0 00	NO	8 00	Buy-through	Contracted amount	
1	8/17/2009 11:00 AM	53 00	1,000 00	YES	7 00	Buy-through	Contracted amount	
3	8/17/2009 3:20 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	8/18/2009 1:00 PM	N/A		N/A	2 00	Curtailment	Contracted amount	
1	8/26/2009 1:00 PM	N/A	0 00	N/A	1 00	Curtailment	Contracted amount	
1	8/26/2009 2:00 PM	40 00	30,000 00	YES	4 00	Buy-through	Contracted amount	
1	8/27/2009 11:00 AM	38 00	30,000 00	YES	7 00	Buy-through	Contracted amount	
2	8/27/2009 11:00 AM	38 00	18,000 00	YES	7 00	Buy-through	Contracted amount	
3	9/14/2009 3:10 PM	N/A		N/A	2 33	Curtailment	Contracted amount	
1	11/4/2009 7:17 AM	N/A	0 00	N/A	0 72	Curtailment	Contracted amount	
3	11/5/2009 6:32 PM	N/A		N/A	0 67	Curtailment	Contracted amount	
3	11/18/2009 8:35 PM	N/A		N/A	1 00	Curtailment	Contracted amount	
3	12/10/2009 6:48 PM	N/A		N/A	2 42	Curtailment	Contracted amount	
1	12/11/2009 6:45 AM	N/A	0 00	N/A	3 00	Curtailment	Contracted amount	
1	12/11/2009 9:45 AM	58 00	28,000 00	YES	1 25	Buy-through	Contracted amount	
1	12/11/2009 11:00 AM	65 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/11/2009 12:00 PM	65 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/11/2009 1:00 PM	58 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/11/2009 2:00 PM	46 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/11/2009 3:00 PM	65 00	28,000 00	YES	4 00	Buy-through	Contracted amount	
3	12/15/2009 7:00 PM	N/A		N/A	1 75	Curtailment	Contracted amount	
1	12/16/2009 6:22 AM	N/A	0 00	N/A	2 38	Curtailment	Contracted amount	
1	12/16/2009 8:45 AM	70 00	1,000 00	YES	0 25	Buy-through	Contracted amount	
1	12/16/2009 9:00 AM	68 00	1,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/16/2009 10:00 AM	57 00	1,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/16/2009 11:00 AM	52 00	1,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/16/2009 12:00 PM	48 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	12/17/2009 6:10 AM	68 00	28,000 00	YES	4 83	Buy-through	Contracted amount	
3	12/17/2009 8:00 AM	N/A		N/A	0 83	Curtailment	Contracted amount	
1	12/17/2009 11:00 AM	50 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/4/2010 7:00 AM	140 00	0 00	NO	5 50	Buy-through	Contracted amount	
2	1/4/2010 7:00 AM	140 00	0 00	NO	5 50	Buy-through	Contracted amount	
1	1/4/2010 12:30 PM	60 00	28,000 00	YES	3 50	Buy-through	Contracted amount	
2	1/4/2010 12:30 PM	60 00	6,000 00	YES	3 50	Buy-through	Contracted amount	

Louisville Gas and Electric Company
Case No. 2009-00549
Detailed Curtailment Data

Reference #	*Start Date/Time*	Offer Price	KW Hrs Purchased	Offer Accepted	*Curtailment or Buy-through* Hours		*Amount Requested*	*Non-Compliance Amount (MW)*
1	1/4/2010 4:00 PM	90 00	20,000 00	YES	5 00	Buy-through	Contracted amount	
2	1/4/2010 4:00 PM	90 00	12,000 00	YES	5 00	Buy-through	Contracted amount	
3	1/4/2010 6:15 PM	N/A		N/A	0 75	Curtailment	Contracted amount	
2	1/5/2010 5:21 AM	N/A	0 00	N/A	2 65	Curtailment	Contracted amount	
1	1/5/2010 5:24 AM	N/A	0 00	N/A	2 60	Curtailment	Contracted amount	
1	1/5/2010 8:00 AM	76 00	28,000 00	YES	11 00	Buy-through	Contracted amount	
2	1/5/2010 8:00 AM	76 00	17,000 00	YES	11 00	Buy-through	Contracted amount	
4	1/5/2010 8:00 AM	76 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	1/6/2010 6:15 AM	N/A	0 00	N/A	0 75	Curtailment	Contracted amount	
2	1/6/2010 6:15 AM	N/A	0 00	N/A	0 75	Curtailment	Contracted amount	
1	1/6/2010 7:00 AM	78 00	28,000 00	YES	5 00	Buy-through	Contracted amount	
2	1/6/2010 7:00 AM	78 00	17,000 00	YES	5 00	Buy-through	Contracted amount	
4	1/6/2010 7:00 AM	78 00	0 00	NO	5 00	Buy-through	Contracted amount	
3	1/6/2010 9:05 AM	N/A		N/A	1 00	Curtailment	Contracted amount	
1	1/6/2010 12:00 PM	62 00	28,000 00	YES	4 00	Buy-through	Contracted amount	
2	1/6/2010 12:00 PM	62 00	17,000 00	YES	4 00	Buy-through	Contracted amount	
1	1/6/2010 4:00 PM	77 00	28,000 00	YES	4 00	Buy-through	Contracted amount	
2	1/6/2010 4:00 PM	77 00	17,000 00	YES	4 00	Buy-through	Contracted amount	
1	1/7/2010 6:00 AM	65 00	1,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/7/2010 6:00 AM	65 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/7/2010 7:00 AM	70 00	17,000 00	YES	4 00	Buy-through	Contracted amount	
1	1/7/2010 10:00 AM	70 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/7/2010 11:00 AM	65 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/7/2010 11:00 AM	65 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/8/2010 6:00 AM	87 00	28,000 00	YES	14 00	Buy-through	Contracted amount	
2	1/8/2010 6:00 AM	87 00	17,000 00	YES	14 00	Buy-through	Contracted amount	
4	1/8/2010 6:00 AM	87 00	0 00	NO	10 00	Buy-through	Contracted amount	
1	1/11/2010 6:00 AM	N/A	0 00	N/A	4 00	Curtailment	Contracted amount	
2	1/11/2010 6:00 AM	N/A	0 00	N/A	4 00	Curtailment	Contracted amount	
4	1/11/2010 7:00 AM	N/A	0 00	N/A	9 00	Curtailment	Contracted amount	
1	1/11/2010 10:00 AM	86 00	28,000 00	YES	2 00	Buy-through	Contracted amount	
2	1/11/2010 10:00 AM	86 00	17,000 00	YES	2 00	Buy-through	Contracted amount	
1	1/11/2010 12:00 PM	N/A	0 00	N/A	3 50	Curtailment	Contracted amount	
2	1/11/2010 12:00 PM	N/A	0 00	N/A	3 50	Curtailment	Contracted amount	
1	1/12/2010 6:00 AM	N/A	0 00	N/A	2 00	Curtailment	Contracted amount	
2	1/12/2010 6:00 AM	N/A	0 00	N/A	2 00	Curtailment	Contracted amount	
1	1/12/2010 8:00 AM	85 00	1,000 00	YES	4 00	Buy-through	Contracted amount	
2	1/12/2010 8:00 AM	85 00	17,000 00	YES	4 00	Buy-through	Contracted amount	
4	1/12/2010 8:00 AM	85 00	0 00	NO	4 00	Buy-through	Contracted amount	
1	1/13/2010 7:00 AM	70 00	28,000 00	YES	4 00	Buy-through	Contracted amount	
2	1/13/2010 7:00 AM	70 00	10,000.00	YES	4 00	Buy-through	Contracted amount	
4	1/13/2010 7:00 AM	70 00	0 00	NO	4 00	Buy-through	Contracted amount	
2	1/14/2010 6:30 AM	N/A	0 00	N/A	2 50	Curtailment	Contracted amount	
2	1/14/2010 9:00 AM	56 00	17,000 00	YES	2 00	Buy-through	Contracted amount	
1	1/27/2010 7:30 AM	N/A	0 00	N/A	0 50	Curtailment	Contracted amount	
2	1/27/2010 7:30 AM	N/A	0 00	N/A	0 50	Curtailment	Contracted amount	
1	1/27/2010 8:00 AM	54 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/27/2010 8:00 AM	54 00	15,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/27/2010 9:00 AM	58 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/27/2010 9:00 AM	58 00	18,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/27/2010 10:00 AM	45 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/27/2010 10:00 AM	45 00	18,000 00	YES	1 00	Buy-through	Contracted amount	
3	1/28/2010 6:45 PM	N/A		N/A	0 83	Curtailment	Contracted amount	
1	1/29/2010 6:15 AM	48 00	28,000 00	YES	0 75	Buy-through	Contracted amount	
2	1/29/2010 6:15 AM	48 00	17,000 00	YES	0 75	Buy-through	Contracted amount	
1	1/29/2010 7:00 AM	63 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/29/2010 7:00 AM	63 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/29/2010 8:00 AM	65 00	28,000 00	YES	1 00	Buy-through	Contracted amount	
2	1/29/2010 8:00 AM	65 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	1/29/2010 9:00 AM	48 00	28,000 00	YES	5 00	Buy-through	Contracted amount	
2	1/29/2010 9:00 AM	48 00	17,000 00	YES	5 00	Buy-through	Contracted amount	
1	1/29/2010 3:00 PM	70 00	28,000 00	YES	5 00	Buy-through	Contracted amount	
2	1/29/2010 3:00 PM	70 00	17,000 00	YES	5 00	Buy-through	Contracted amount	
1	2/1/2010 6:00 AM	60 00	32,000 00	YES	1 00	Buy-through	Contracted amount	
2	2/1/2010 6:00 AM	60 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	2/1/2010 7:00 AM	62 00	32,000 00	YES	1 00	Buy-through	Contracted amount	
2	2/1/2010 7:00 AM	62 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	2/1/2010 8:00 AM	59 00	32,000 00	YES	1 00	Buy-through	Contracted amount	
2	2/1/2010 8:00 AM	59 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	2/1/2010 9:00 AM	58 00	32,000 00	YES	1 00	Buy-through	Contracted amount	
2	2/1/2010 9:00 AM	58 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
1	2/1/2010 10:00 AM	52 00	32,000 00	YES	1 00	Buy-through	Contracted amount	
2	2/1/2010 10:00 AM	52 00	17,000 00	YES	1 00	Buy-through	Contracted amount	
3	2/15/2010 10:15 AM	N/A		N/A	2 00	Curtailment	Contracted amount	
3	2/16/2010 5:35 PM	N/A		N/A	3 92	Curtailment	Contracted amount	
3	2/17/2010 6:50 PM	N/A		N/A	1 17	Curtailment	Contracted amount	

Louisville Gas and Electric Company
Case No 2009-00549
Detailed Curtailment Data

Reference #	Start Date/Time	Offer Price	KW Hrs Purchased	Offer Accepted	Hours	*Curtailment or Buy-through*	*Amount Requested*	*Non-Compliance Amount (MW)*
3	2/18/2010 10:10 AM	N/A		N/A	1 42	Curtailment	Contracted amount	
3	2/23/2010 10:20 AM	N/A		N/A	3 67	Curtailment	Contracted amount	

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 4

Responding Witness: Robert M. Conroy

Q-4. Referring to Rider CSR2, please explain why (in LG&E's opinion) no customers are currently served under the rider. Provide all workpapers, studies, analyses, and documents supporting and/or underlying the response.

A-4. LG&E does not know why customers choose CSR service and can only speculate that industrial customers find more value in firm service relative to their production schedules.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 5

Responding Witness: Charles R. Schram/William Steven Seelye

Q-5. Please identify all reports, studies, and/or analyses conducted by on behalf of LG&E or its parent company in the past 5 years related in total or in part to retail interruptible or curtailable electric service in Kentucky.

A-5. No such studies have been conducted.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 6

Responding Witness: Charles R. Schram

Q-6. Please explain in detail how LG&E (acting alone or in conjunction with affiliates) treats interruptible/curtailable load in:

a. Developing its long-run load forecast?

b. Determining its long-run need for future supply-side resources?

c. Determining its need for operating reserve capacity?

d. Providing ancillary services?

A-6. a. In developing its long-run load forecast, LG&E assumes that loads for its interruptible/curtailable customers will be curtailed in hours with the highest demands (peak hours). For example, if LG&E is permitted to curtail a customer 200 hours per year, it assumes that customer's load will be curtailed in the top 200 hours (based on demand).

b. LG&E utilizes its long-run load forecast to determine its long-run need for future supply-side resources. Therefore, interruptible/curtailable customers are assumed to be curtailed during the hours with the highest demands.

c. LG&E does not consider interruptible/curtailable loads in determining its need for operating reserve capacity because there is no guarantee that interruptible/curtailable customers will be operating at the times when operating reserves are needed.

d. See response to part (c). Due to the uncertainty in interruptible/curtailable loads, they are not considered in providing ancillary services.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 7

Responding Witness: Lonnie E. Bellar/Charles R. Schram

Q-7. Identify all reserve sharing and/or coordination arrangements that LG&E has with other utility systems or organizations, and provide a current copy of all agreements related to such arrangements.

A-7. The documents responsive to the question are being provided under seal pursuant to a petition for confidential treatment.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 8

Responding Witness: Robert M. Conroy

Q-8. Please explain in detail how LG&E treats curtailment buy-though revenues in setting base rates and/or modifying its Fuel Adjustment Clause.

A-8. LG&E reduces purchase power expense and kWh by the amount of buy-through power to ensure that retail customers' FAC reflects only those power purchases used to supply native load consumption not served by buy through energy.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 9

Responding Witness: William Steven Seelye

Q-9. Please identify and explain in detail how LG&E treats test-year curtailment buy-though revenues in the electric cost-of-service study filed in this case.

A-9. In the cost of service study, curtailment buy through revenues are included in *Sales to Ultimate Consumers* shown on page 37 of Seelye Exhibit 24.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 10

Responding Witness: William Steven Seelye

Q-10. Please identify and explain in detail how LG&E treats test-year curtailment credits paid to CSR1 and CSR3 customers in the electric cost-of-service study filed in this case.

A-10. Test year curtailment credits paid to CSR1 customers are included in Sales to Ultimate Consumers shown on page 37 of Seelye Exhibit 24. Specifically, the revenues are credited to Industrial TOD Primary or Retail Transmission Service as applicable. LG&E does not have any customers on CSR3.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 11

Responding Witness: Robert M. Conroy

Q-11. Please identify and describe in detail the conditions and circumstances under which LG&E can issue a curtailment request under:

a. Existing Riders CSR1, CSR2, and CSR3?

b. Proposed Rider CSR.

A-11. a. Curtailment requests under CSRs are issued at LG&E/KU's sole discretion for reliability and/or economic reasons.

b. See response to (a.) above.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 12

Responding Witness: Charles R. Schram

Q-12. Please provide LG&E's current estimated cost in 2010 dollars of an installed combustion turbine. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this estimate.

A-12. The Company's current estimate of the installed cost of a combustion turbine would incorporate two perspectives:

First, regarding the likely 'new order' cost, in preparation for the Companies' 2008 Integrated Resource Plan ("IRP"), consultants Cummins and Barnard were commissioned to provide estimated capital costs for a range of generation technologies. Their estimated overnight construction cost for a ~155 MW (net summer rating) combustion turbine was $680/kW in $2007 terms – equivalent to around $730/kW in $2010. A copy of the 2008 IRP is provided in response to Question No. 16.

Second, given current conditions in the power market, the Company would expect the prices of existing CT assets to be significantly below the cost of new construction. For example, amongst asset sales transactions reported within the last year, Oglethorpe Power Corporation acquired around 850 MW of combustion turbine capacity in Georgia at just over $400/kW (the 360 MW Hartwell Energy Facility, purchased from an investor group, and the 495 MW Heard County Facility, purchased from Dynegy).

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 13

Responding Witness: Charles R. Schram/William Steven Seelye

Q-13. Please provide a levelized fixed charge rate for a new combustion turbine using LG&E's cost of capital and tax rates. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.

A-13. See attached.

IN-SERVICE COST	100.00	COST OF REMOVAL	0.00
BOOK LIFE (YRS)	30	TAX LIFE (YRS)	15
CONSTRUCTION YEARS (10 MAX)	3	CAPITAL ESC RATE (%)	1.22
ANNUAL EXPEND (%)	28 61 11 0 0 0 0 0 0 0		
ELIGIBLE FOR CWIP	100.00	GENERATION PROJECT? (Y OR N)	Y

AFUDC DATA (%)	RATIO	COST
EQUITY	52.49	10.63
DEBT	47.51	4.34

FINANCIAL DATA (%)	RATIO	COST
PREFERRED STOCK	0.00	0.00
COMMON STOCK	52.49	10.63
DEBT	47.51	4.34
WEIGHTED AVERAGE COST OF CAPITAL		7.64

TAX RATES (%)			
INCOME	38.90	GROSS RECEIPTS	00.00
AD-VALOREM	0.15	CAPITALIZED INT	4.34

INSURANCE RATE (%) 0.138

TAX DEPRECIATION METHOD -3- DEC BAL RATE -1.50-

1 = STRAIGHT LINE
2 = DECLINING BALANCE
3 = DECLINING SWITCH TO STRAIGHT LINE
4 = SUM OF YEARS DIGITS
5 = SUM OF YEARS DIGITS SWITCH TO STRAIGHT LINE
6 = ACCRELATED COST RECOVERY SYSTEM
7 = SINKING FUND

CONSTRUCTION PERIOD

YR	CONST BAL	AFUDC DEBT	AFUDC EQTY	ACCUM AFUDC	ACCUM CAP INT	CONST RATE BASE	TAX DEFR	ACCUM TAX DEFR	EQTY RETN	DEBT RETN	TAX PAID	REV REQ	DISC RATE	PV OF REV REQ	ACCUM FV OF REV REQ
1	27.72	0.00	0.00	0.00	0.60	27.95	-0.23	-0.23	1.56	0.58	1.23	3.13	1.159	3.63	3.63
2	88.84	0.00	0.00	0.00	3.16	90.07	-0.99	-1.23	5.03	1.86	4.19	10.08	1.076	10.85	14.48
3	100.00	0.00	0.00	0.00	5.27	102.05	-0.82	-2.05	2.85	1.05	2.64	5.71	1.000	5.71	20.19

IN-SERVICE PERIOD

YR	INVEST	UNRCVD INV BOOK	BOOK DEPR	TAX DEPR TYPE	UNRCVD INV TAX	TAX DEPR	TAX DEFR	ACUM TAX DEFR	EQTY RETN	DEBT RETN	TAX PAID	AD VAL TAX	INS COST	REV REQ	DISC RATE	PV OF REV REQ	ACCUM PV OF REV REQ	PROJ TO DATE FCR
1	100.00	100.00	1.67	2	105.27	5.26	1.40	-0.65	2.76	1.02	0.36	0.08	0.07	7.35	1.000	7.35	27.54	27.54
2	0.00	98.33	3.33	2	100.01	10.00	2.59	1.94	5.19	1.92	0.71	0.15	0.14	14.04	0.929	13.04	40.58	21.04
3	0.00	95.00	3.33	2	90.01	9.00	2.20	4.15	4.88	1.80	0.90	0.14	0.14	13.41	0.863	11.57	52.16	18.68
4	0.00	91.67	3.33	2	81.01	8.10	1.85	6.00	4.59	1.70	1.07	0.14	0.14	12.83	0.802	10.28	62.44	17.37
5	0.00	88.33	3.33	2	72.91	7.29	1.54	7.54	4.32	1.60	1.21	0.13	0.14	12.27	0.745	9.14	71.58	16.50
6	0.00	85.00	3.33	2	65.62	6.56	1.26	8.80	4.07	1.50	1.33	0.13	0.14	11.76	0.692	8.14	79.72	15.85
7	0.00	81.67	3.33	1	59.06	6.22	1.12	9.92	3.82	1.41	1.31	0.12	0.14	11.25	0.643	7.23	86.95	15.33
8	0.00	78.33	3.33	1	52.84	6.22	1.12	11.04	3.57	1.32	1.15	0.12	0.14	10.75	0.597	6.42	93.37	14.89
9	0.00	75.00	3.33	1	46.62	6.22	1.12	12.16	3.32	1.23	0.99	0.11	0.14	10.24	0.555	5.68	99.05	14.51
10	0.00	71.67	3.33	1	40.41	6.22	1.12	13.28	3.07	1.14	0.83	0.11	0.14	9.74	0.515	5.02	104.07	14.18
11	0.00	68.33	3.33	1	34.19	6.22	1.12	14.40	2.82	1.04	0.68	0.10	0.14	9.24	0.479	4.42	108.50	13.87
12	0.00	65.00	3.33	1	27.97	6.22	1.12	15.52	2.57	0.95	0.52	0.10	0.14	8.73	0.445	3.89	112.38	13.60
13	0.00	61.67	3.33	1	21.76	6.22	1.12	16.65	2.33	0.86	0.36	0.09	0.14	8.23	0.413	3.40	115.78	13.34

14	0.00	58.33	3.33	1	15.54	6.22	1.12	17.77	2.08	0.77	0.20	0.09	0.14	7.73	0.384	2.97	118.75	13.10
15	0.00	55.00	3.33	1	9.32	6.22	1.12	18.89	1.83	0.68	0.04	0.08	0.14	7.22	0.357	2.58	121.33	12.88
16	0.00	51.67	3.33	1	3.11	3.11	-0.09	18.80	1.65	0.61	1.14	0.08	0.14	6.85	0.331	2.27	123.60	12.68
17	0.00	48.33	3.33	0	0.00	0.00	-1.30	17.50	1.53	0.57	2.27	0.07	0.14	6.62	0.308	2.04	125.64	12.49
18	0.00	45.00	3.33	0	0.00	0.00	-1.30	16.21	1.42	0.52	2.20	0.07	0.14	6.39	0.286	1.83	127.46	12.32
19	0.00	41.67	3.33	0	0.00	0.00	-1.30	14.91	1.31	0.48	2.13	0.06	0.14	6.16	0.266	1.64	129.10	12.17
20	0.00	38.33	3.33	0	0.00	0.00	-1.30	13.61	1.19	0.44	2.06	0.06	0.14	5.92	0.247	1.46	130.56	12.03
21	0.00	35.00	3.33	0	0.00	0.00	-1.30	12.32	1.08	0.40	1.98	0.05	0.14	5.69	0.229	1.30	131.87	11.90
22	0.00	31.67	3.33	0	0.00	0.00	-1.30	11.02	0.97	0.36	1.91	0.05	0.14	5.46	0.213	1.16	133.03	11.77
23	0.00	28.33	3.33	0	0.00	0.00	-1.30	9.72	0.85	0.31	1.84	0.04	0.14	5.22	0.198	1.03	134.06	11.66
24	0.00	25.00	3.33	0	0.00	0.00	-1.30	8.43	0.74	0.27	1.77	0.04	0.14	4.99	0.184	0.92	134.98	11.56
25	0.00	21.67	3.33	0	0.00	0.00	-1.30	7.13	0.63	0.23	1.69	0.03	0.14	4.76	0.171	0.81	135.79	11.46
26	0.00	18.33	3.33	0	0.00	0.00	-1.30	5.83	0.51	0.19	1.62	0.03	0.14	4.52	0.159	0.72	136.51	11.37
27	0.00	15.00	3.33	0	0.00	0.00	-1.30	4.54	0.40	0.15	1.55	0.02	0.14	4.29	0.147	0.63	137.14	11.28
28	0.00	11.67	3.33	0	0.00	0.00	-1.30	3.24	0.28	0.10	1.48	0.02	0.14	4.06	0.137	0.56	137.70	11.20
29	0.00	8.33	3.33	0	0.00	0.00	-1.30	1.94	0.17	0.06	1.41	0.01	0.14	3.83	0.127	0.49	138.19	11.12
30	0.00	5.00	3.33	0	0.00	0.00	-1.30	0.65	0.06	0.02	1.33	0.01	0.14	3.59	0.118	0.42	138.61	11.05
31	0.00	1.67	1.67	0	0.00	0.00	-0.65	0.00	-0.00	-0.00	0.65	0.00	0.07	1.74	0.110	0.19	138.80	10.97
																30 Yr Fcr =		11.07

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 14

Responding Witness: Charles R. Schram

Q-14. Please provide the estimated fixed O&M for a new combustion turbine in 2010 dollars. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.

A-14. In preparation for the Companies' 2008 Integrated Resource Plan ("IRP"), consultants Cummins and Barnard were commissioned to provide capital and operating cost estimates for a range of generation technologies. Their estimate of the fixed O&M cost for a new 155 MW combustion turbine was $12/kW-year in $2007 terms – equivalent to around $13/kW-year in $2010 terms. A copy of the 2008 IRP is provided in response to Question No. 16.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 15

Responding Witness: Charles R. Schram

Q-15. Please provide LG&E's required reserve margin for capacity planning. Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.

A-15. The KU/LG&E planning reserve margin is outlined in the 2008 Integrated Resource Plan ("IRP"). A copy of the 2008 IRP is provided in response to Question No. 16.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 16

Responding Witness: Lonnie E. Bellar/Charles R. Schram

Q-16. Please provide a copy of LG&E's most recent integrated resource plan.

A-16. The most recent LG&E and KU Integrated Resource Plan was filed in Case No. 2008-00148. The filing is included on the attached CD in the folder titled Question No. 16.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 17

Responding Witness: Lonnie E. Bellar/ William Steven Seelye

Q-17. Referring to the direct testimony of LG&E witness Seelye at 21:15 – 24:19:

a. Explain in detail the rationale underlying LG&E's decision to consolidate Riders CSR1, CSR2, and CSR3.

b. Explain in detail the rationale for the 200 MW total requirements limit in the Availability of Service section of Rider CSR.

c. Explain in detail whether (and if so, why) LG&E would object to counting each called curtailment as a minimum 4-hour curtailment, even if canceled before the end of the 4-hour period.

d. Explain in detail the rationale underlying the decision to split the 500 hours of total available curtailment into 100 hours of physical curtailment and 400 hours of curtailment with a buy-through option (buy-through curtailment). Provide all workpapers, studies, analyses, and documents supporting and/or underlying this response.

e. Provide all workpapers, studies, analyses, and documents supporting and/or underlying LG&E's decision to price buy-though power using an automatic, formula-based mechanism.

f. Identify all other utilities known to LG&E that have a formula-based pricing mechanism for buy-through power.

g. Explain in detail why LG&E did not propose pricing buy-through power on the basis of market prices.

h. Provide all workpapers, studies, analyses, and documents supporting and/or underlying the heat rate reflected in the proposed buy-through formula.

i. Provide all workpapers, studies, analyses, and documents supporting and/or underlying the proposed 10-minutes notice in Rider CSR.

j. Provide all documents relating to any customer comments and/or feedback that LG&E received regarding the proposed 10-minutes notice prior to LG&E's deciding to include this notice provision in Rider CSR.

k. Describe in detail conditions that will trigger LG&E's decision to call a buy-through curtailment.

l. Describe in detail conditions that will trigger LG&E's decision to call a physical curtailment.

A-17. a. The Company is proposing to consolidate CSR1, CSR2, and CSR3 in order to offer a single curtailable service rider whose terms and conditions more accurately match the operating characteristics of a new combustion turbine, which is assumed to be avoided by curtailable service. The three riders with widely varying parameters cannot individually meet that goal.

b. The 200 MW limit has long term planning implications. Since customers have the ability to exit the CSR, the Company must consider the extended time horizon for planning and constructing generation resources. For example, a higher CSR limit could pose a risk if customers decided to exit curtailable service, since the Company would be required to provide additional supply without sufficient planning and construction timelines.

c. LG&E would object to counting each curtailment as a minimum 4-hour curtailment, even if canceled before the end of the 4-hour period, because the need to curtail does not always last for 4 hours. If 4 hours is counted for each curtailment then value is being removed from other customers as explained in the answer to KIUC 1-11.

d. There was no detailed analysis. The new CSR is the result of internal discussion to simplify the process for all existing participating industrials. The 100 hours of curtailment requests may be issued to ensure adequate reserve supply for reliable operations during peak conditions, (to avoid the need to buy power or build future generation). The 400 hours of curtailment requests with buy through gives the customer the opportunity to buy through at current gas prices and CT heat rates, the value of which is included in the monthly FAC thus lowering the cost of energy to all customers. If the customer elects not to buy through then excess supply above reserves is available to make off system sales, (the profit of which is included in the revenue requirements of LG&E/KU in rate making).

e. There are no work papers. The business reasons for this approach were ease of implementation for the companies and to provide price transparency for the customer.

f. LG&E has not researched what other utilities offer for curtailable service.

g. See response to (e.) above.

h. While no studies were performed, the heat rate in the proposed buy through formula corresponds to the heat rate of several of the Companies' combustion turbines.

i. There are no workpapers. The 10-minute notice corresponds to the start-up capability for a quick start combustion turbine.

j. Please see the response to KPSC-2 Question No. 97.

k. Curtailment requests under CSR are issued at LG&E's sole discretion for reliability and/or economic reasons.

l. See response to (k.) above.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 18

Responding Witness: Charles R. Schram

Q-18. If LG&E were able to interrupt a CSR customer's load instantaneously, would that customer's curtailable load be more valuable to LG&E than load that is curtailable only with a longer notice? Please explain the response in detail.

A-18. In today's electric industry there is no quantifiable benefit for having less than a 10-minute curtailment notice.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 19

Responding Witness: William Steven Seelye

Q-19. Referring to witness Seelye's statement regarding why Rider CSR's 10-minute notice is consistent with the requirement for using capacity as spinning reserves (direct at 24:1-4):

a. Explain in detail what is meant by this testimony.

b. Define *spinning reserves,* describe and discuss how LG&E's spinning reserves requirement is determined, and describe whether and how LG&E could use 10-minute (or less) curtailable load to meet its spinning reserve requirement?

A-19. a. NERC Standards require an electric system that loses supply to recover in 15 minutes. For a resource to be of any value in the management of generation resource loss recovery it must respond in the 15 minute period. It normally takes the system operational personnel 3 to 5 minutes to evaluate and execute a mitigation plan. Therefore a resource must be fully deployed in 10 minutes.

b. The NERC definition of Spinning Reserves is: "Unloaded generation that is synchronized and ready to serve additional demand." Spinning reserve is part of contingency reserves. Contingency reserves are used to comply with NERC Disturbance Control Standards. NERC does not define a specific amount of spinning reserve required in contingency reserves. The required amount of contingency reserves and the amount of spinning reserves are defined in the CRSG documents provided under question KIUC 1-7.

To be clear, LG&E can only use 10 minute curtailable load if it is certain that such load will be available to be curtailed during some future loss of supply. Due to the lack of certainty of curtailable load being available at some future time it cannot be used for contingency reserves. Although a 10-minute notice of curtailment is important to the Company in the management of generation resource loss recovery, curtailable power is not of equal value to a quick-start combustion turbine in terms of meeting contingency reserve requirements.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 1, 2010

Question No. 20

Responding Witnesses: Lonnie E. Bellar/Charles R. Schram/William Steven Seelye

Q-20. Referring to existing Riders CSR1, CSR2, and CSR3:

a. Does LG&E only provide buy-though power under Riders CSR1 and CSR2 though market purchases?

b. Explain in detail how LG&E makes market purchases for buy-through power (including descriptions of products purchased), and whether such purchases are only available in take-or-pay blocks.

c. If the answer to subpart (a) above is no, identify the other source(s) of energy used to supply buy-though power and explain in detail how LG&E prices such energy and conveys these prices to customers.

d. If LG&E supplies energy to meet buy-through loads from system generating resources, explain in detail why energy from system resources should be priced on a take-or-pay basis.

e. Explain in detail how LG&E notifies a customer about a buy-through curtailment and the price of energy for buy-through.

f. Is the buy-through price quoted to a customer at the time of a curtailment notice the final price that the customer is charged for any buy-through power purchased? If the answer is anything but an unequivocal yes, please explain how the final purchase price is determined and when that price is conveyed to the curtailment customer.

g. Provide all workpapers, studies, analyses, and documents supporting and/or underlying the $16 per kW Non-Compliance Charge.

A-20. a. Yes for CSR1. There are no customers under CSR2.

b. Buy throughs are provided by buying the exact amount required for the

customer for the expected period of curtailment. This is accomplished in a fixed odd lot purchase. While the purchases that the Company makes to supply buy-through power are technically not take or pay, once the customer elects to buy through, the Company *commits* to a purchase on behalf of the customer and the customer has to take or pay for the power purchased. This ensures that other customers do not have to bear the cost of purchase power not taken by the curtailed customer.

c. Not applicable.

d. LG&E does not supply energy to meet buy through loads from system generating resources.

e. System operation personnel survey the market for the best price for an expected odd lot volume of energy and also checks for transmission availability. Next system operation personnel contact the customer by phone at least 20 minutes in advance of the curtailment to inform the customer of the start time of the curtailment and to inquire if the customer wishes to buy through if power and transmission is available. Next the customer needs to immediately inform system operation personnel if they wish to buy through. Any delay in a decision by the customer could result in the power and transmission not being available minutes later.

f. No. The process is described in answer "e" above. On a few occasions, it should be noted that after the customer agrees to a buy through and then system operation personnel execute the purchase of an odd lot of power with a supplier the price may have lowered. In such cases the lower price is used to bill the customer for the buy through. If the price at the time of execution of a purchase from a supplier is higher, the higher price is communicated back to the customer and the customer must state agreement promptly if they wish for the system operation personnel to execute the purchase.

g. The $16 per kW Non-Compliance Charge was introduced in the proposed CSR rates filed in Case No. 2003-00433 and reflected approximately 4 months of the $4.05/kW primary voltage credit proposed in that proceeding. See page 75 of Mr. Seelye's direct testimony in Case No. 2003-00433. Although the Company is not proposing to increase the Non-Compliance Charge in this proceeding, 4 months of the $5.20/kW primary voltage credit would result in a Non-Compliance Charge of approximately $21.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 26, 2010

Question No. 1

Responding Witness: Lonnie E. Bellar/Counsel

Q-1. Referring to LG&E's response to KIUC Data Request 1-1d, please note that the request only addresses alternatives that were considered but rejected—not the basis for KU's decision to reject any alternative that was not included in its application. Therefore, please provide the requested information.

A-1. As previously stated in response to KIUC Data Request 1-1(d), any response to this question necessarily requires the Company to reveal the contents of its communications with counsel and the mental impressions of counsel, which information is protected from disclosure by the attorney-client privilege and work product doctrine.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 26, 2010

Question No. 2

Responding Witness: Lonnie E. Bellar/William Steven Seelye

Q-2. Referring to LG&E's response to KIUC Data Request 1-3:

a. Please provide the information requested in KIUC Data Request 1-3b for each physical curtailment.

b. Please provide the information provided in response to KIUC Data Request 1-3c in native format (preferably Excel).

A-2. a. The contract with the customer under the CSR is for a "firm" demand level and not a curtailable amount. When a curtailment is requested, the request is for the customer to curtail its load down to the contract firm amount. Therefore, the "MW of load curtailment requested" for each physical curtailment is not known and could not be provided as requested. Only under a "buy-through" curtailment is the amount the customer desires to purchase known. That information was provided in the attachment to the response.

b. An electronic version of the attachment to the response to KIUC 1-3 is included on the CD in the file folder titled Question No. 2.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 26, 2010

Question No. 3

Responding Witness: Lonnie E. Bellar

Q-3. Referring to LG&E's response to KIUC Data Request 1-4, please explain in detail why LG&E has not attempted to learn from customers why they have not taken service under Rider CSR2.

A-3. The parameters of Rider CSR2 are the result of a settlement agreement from the Company's 2008 rate case and reflect the input of the consumer representatives who participated in that case. This rate schedule has been effective since February 6, 2009 or slightly more than a year. During this time, the customers who are eligible for this rider have experienced significant challenges from the changes in the economy. Company account representatives routinely meet with these customers to review their energy requirements and expected operations, and the various rate schedules applicable. To the extent that customers inquire about service under Rider CSR2 or it appears to be a viable option, the Company discusses pros and cons of taking service under this rider with the customer.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to First Second Set of Data Requests of
Kentucky Industrial Utility Customers, Inc.
Dated March 26, 2010

Question No. 4

Responding Witness: Charles R. Schram

Q-4. Referring to LG&E's response to KIUC Data Request 1-12, please provide all workpapers, studies, analyses, and documents supporting and/or underlying the statement regarding Oglethorpe Power Corporation's purchase of CT capacity.

A-4. See attached.

Louisville Gas and Electric Company
Case No. 2009-00549

Supporting Data for CT Capacity Purchases

Announce Date	Plant Name	Owner	Ultimate Parent	Fuel Type	Generation Technology	Year First Unit In Service	Current Operating Capacity (MW)	Total Deal Installed Nameplate Capacity (MW)	State	NERC Region Code	Buyer Name	Seller Name	Completed Transaction Value ($000)	Announced Deal Transaction Value/ Nameplate Cap ($/KW)	Deal Summary
7/24/2009	Hartwell Energy Facility	Hartwell Energy Ltd. Partnership	Oglethorpe Power Corporation	Gas	Combustion Turbine	1994	300	360	GA	SERC	Oglethorpe Power Corporation	Investor group	148,500	413	Tucker, Ga.-based Oglethorpe Power Corp. has acquired Hartwell, Ga.-based Hartwell Energy Limited Partnership from an investor group, consisting of London-based International Power PLC, Irving, Texas-based Natural Gas Partners LLC and Paul Prager, a private investor. Hartwell owns a 360 MW peaking power plant, located in Hart County, Georgia.
2/25/2009	Hawk Road Energy Facility	Heard County Power, LLC	Oglethorpe Power Corporation	Gas	Combustion Turbine	2001	566	495	GA	SERC	Oglethorpe Power Corporation	Dynegy Inc.	203,100	410	Tucker, Ga.-based Oglethorpe Power Corp. has acquired Heard County power facility from a subsidiary of Houston-based Dynegy Inc. Heard County is a 495 MW natural gas-fired peaking facility, located in Heard County, Ga.

Source: SNL Financial

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Second Data Request of Commission Staff
Dated March 1, 2010

Question No. 13

Responding Witness: William Steven Seelye

Q-13. Refer to P.S.C. Electric No. 8, Original Sheet Nos. 50 through 50.2. For average example customers to be served under the proposed Curtailable Service Rider ("CSR"), one from each current CSR tariff serving customers, provide the effect of all proposed tariff changes on the customers' credits in sufficient detail to show the individual effect of each rate/tariff change as shown on the tariff sheet. Include the effect of choosing Option A or Option B.

A-13. The effect of the proposed tariff changes will depend heavily on customer decisions under the proposed CSR tariff. For example, the effect of adopting the proposed CSR tariff will depend on whether a customer taking service under CSR chooses to curtail its load or to utilize the buy-through option when a non-physical curtailment is requested by the Company. If the customer chooses the buy-through option then the price that the customer pays for power will be determined in accordance with the automatic buy-through price formula set forth in the tariff.

Option A

Under Option A, the customer would contract for a specific amount of firm demand. During a physical curtailment the customer would be required to reduce its total demand to a level at or below the designated firm demand. During a request for curtailment with a buy-through option, the customer could choose to curtail its demand to a level at or below its firm demand or to purchase the power in accordance with the formula for the automatic buy-through price set forth in the tariff. The customer would receive a Curtailable Credit regardless of whether the Company requests a curtailment or not.

The customer will receive a billing credit determined by applying the demand credit set forth in the tariff ($5.10 per kW for Transmission Voltage customers and $5.20 per kW for Primary Voltage customers) to the difference between (i) the customer's maximum 15-minute kW demand measured during the Curtailable Billing Period and (ii) the customer's designated firm demand. During the months of May through September, the Curtailable Billing Period would correspond to the period from 10 A.M. to 10 P.M.; and during all other months the Curtailable Billing Period would correspond to the period from 6 A.M. to 10 P.M.

Therefore, if a primary voltage customer designates a firm demand of 10,000 kW and its maximum 15-minute kW demand is 20,000 kW during the Curtailable Billing Period for a month, then the customer will receive the following billing credit (billing reduction):

Billing Credit = (20,000 kW - 10,000 kW) x $5.20/kW

= $52,000

As mentioned earlier, the customer would receive the billing credit even if the Company does not request that the customer curtail its demand during the month.

The Company is not proposing to change the credit from the level currently set forth in CSR1. Under the proposed CSR tariff the credit will be applied in the same way that it is currently applied in CSR1, CRS2, and CSR3, except that the Curtailable Demand will be determined as the difference between the customer's maximum demand during the Curtailable Billing Period and the customer's firm demand rather than simply the difference between the customer's maximum demand and the customer's firm demand. The reason that the Company is proposing this change is to help ensure that it is not providing a credit for curtailable load that would likely never be called upon or otherwise utilized by the Company.

If the Company requests a physical curtailment during the month, then the customer would be required to reduce its demand to 10,000 kW or less. Under the proposed CSR tariff, the Company could request up to 100 hours of physical curtailment per year. If the Company requests a curtailment with a buy-through option, then the customer could choose either to reduce its demand to 10,000 kW or less, or purchase buy-through power at the Automatic Buy-Through Price. For example, if the customer's average demand during a curtailment lasting 5 hours is 20,000 kW then under a buy-through the customer would purchase 50,000 kWh ([20,000 kW - 10,000 kW] x 5 hours = 50,000 kWh) at the Automatic Buy-Through Price. If the mid-point price for natural gas posted for the day in "Gas Daily" for Dominion – South Point is $4.995 per MMBTU (which is the price posted on March 2, 2010, for the flow-through date of March 3, 2010), the charges that would be incurred for the buy-through power would be as follows:

Buy-Through Cost = 50,000 kWh x $4.995/MMBtu x 0.012000 MMBtu/kWh

= $2,997

In this example, the average price for the buy-through would be $0.05994 per kWh.

Option B

Under Option B, the customer would contract for a specific amount of Curtailable Load. During a physical curtailment the customer would be required to reduce its total demand *by* the designated Curtailable Load. During a request for curtailment with a buy-through option, the customer could choose either to curtail its demand by the designated Curtailable Load or to purchase power at the automatic buy-through price set forth in the tariff.

Under Option B, the customer will receive a billing credit that will be determined by applying the demand credit set forth in the tariff ($5.10 per kW for Transmission Voltage customers and $5.20 per kW for Primary Voltage customers) to the customer's designated Curtailable Load.

Therefore, if a primary voltage customer designates a Curtailable Load of 10,000 kW then the customer will receive the following billing credit for the month:

Billing Credit = 10,000 kW x $5.20/kW

= $52,000

Although it doesn't matter what the customer's maximum demand is during the month for purposesof determining the billing credit, the customer must stand ready at all times to reduce its demand by the Curtailable Load. In this example, the customer would be required to effect a 10,000 kW reduction in its demand whenever the Company requests a physical curtailment. As with Option A, the customer would receive the billing credit even if the Company does not request that the customer curtail its demand during the month.

The buy-through provision would operate in the same manner as illustrated in the example for the hypothetical customer taking service under Option A, except that the buy-through price would be applied to the Curtailable Load multiplied by the number of hours or partial hours for the curtailment. Therefore, if a five hour curtailment is requested and the customer chooses the buy-through option then the buy-through cost would be exactly the same as shown for Option A.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Second Data Request of Commission Staff
Dated March 1, 2010

Question No. 97

Responding Witness: Lonnie E. Bellar

Q-97. Beginning at page 21, the Seelye Testimony discusses the proposed changes to the curtailable service riders. State whether LG&E has discussed the proposed changes with those customers. If so, provide the customers' responses.

A-97. LG&E did not discuss with customers the proposed changes to the curtailable service riders prior to the filing of the Application. The Company routinely has discussions about service, billing, tariffs and other topics related to providing service to their facilities. Since the filing of the Application discussions about various aspects of the filing as it relates to service to the customer's facilities have occurred.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Attorney General's Initial Requests for Information
Dated March 1, 2010

Question No. 235

Responding Witness: William Steven Seelye

Q-235. Please explain how interruptible (curtailment riders: CSR1, CSR2, and CSR3) customers' demands and energy usage are reflected in the LG&E class cost of service study.

A-235. Curtailable customers' actual energy usages were used to develop the energy allocation factors. The customers' CP demands are adjusted to reflect levels that would have occurred had the customers not been curtailed, as applicable.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Attorney General's Initial Requests for Information
Dated March 1, 2010

Question No. 236

Responding Witness: Robert M. Conroy/William Steven Seelye

Q-236. With regard to LG&E's current Curtailment Service Rider 1 ("CSR1"), please provide the following amounts by rate schedule, separated between Primary and Transmission, for each month of the test year:

(a) number of customers;

(b) total firm contract demand;

(c) total contract curtailment load;

(d) total billing demand;

(e) total demand credits;

(f) total non-compliance charges by month; and,

(g) listing of date, time, duration, and estimated MW curtailment.

Please provide in hard copy as well as in Microsoft readable electronic format (preferably Microsoft Excel).

A-236. (a) – (f) See attached. Also see attached CD, in folder titled Question No. 236 for the Microsoft Excel version of the attachment.

(g) See attached.

Louisville Gas and Electric Company

Case No. 2009-00549

Curtailment Service Rider 1 (CSR1) - Primary

For the Test Year Ending October 31, 2009

	Number of Customers	Total Firm Contract Demand (kW)	Total Contract Curtailment Load (kW)	Total Basic Billing Demand (kW)	Total Peak Billing Demand (kW)	Total Demand Credits ($)	Total Non-Compliance Charges ($)
	(a)	(b)	(c)	(d)	(d)	(e)	(f)
Nov-08	1	3,000	0	43,238	43,238	$ (128,761.60)	$ -
Dec-08	1	3,000	0	33,024	33,024	$ (96,076.80)	$ -
Jan-09	1	3,000	0	41,088	40,934	$ (121,881.60)	$ -
Feb-09	1	3,000	0	42,317	42,163	$ (190,406.62)	$ -
Mar-09	0	3,000	0	0	0	$ -	$ -
Apr-09	1	3,000	0	42,317	42,317	$ (204,447.36)	$ -
May-09	1	3,000	0	42,163	42,163	$ (162,918.91)	$ -
Jun-09	2	3,000	0	39,475	43,085	$ (248,352.00)	$ -
Jul-09	1	3,000	0	31,027	31,027	$ (145,741.44)	$ -
Aug-09	1	3,000	0	32,870	32,870	$ (155,326.08)	$ -
Sep-09	1	3,000	0	32,947	32,947	$ (155,725.44)	$ -
Oct-09	1	3,000	0	33,024	33,024	$ (156,124.80)	$ -

Louisville Gas and Electric Company

Case No. 2009-00549

Curtailment Service Rider 1 (CSR1) - Transmission

For the Test Year Ending October 31, 2009

	Number of Customers	Total Firm Contract Demand (kW)	Total Contract Curtailment Load (kW)	Total Basic Billing Demand (kW)	Total Peak Billing Demand (kW)	Total Demand Credits ($)	Total Non-Compliance Charges ($)
	(a)	(b)	(c)	(d)	(d)	(e)	(f)
Nov-08	1	3,000	0	30,528	30,528	$ (63,636.80)	$ -
Dec-08	1	3,000	0	30,912	30,528	$ (64,827.20)	$ -
Jan-09	1	3,000	0	28,224	28,224	$ (56,494.40)	$ -
Feb-09	0	3,000	0	0	0	$ -	$ -
Mar-09	2	3,000	0	44,823	44,899	$ (66,369.37)	$ -
Apr-09	0	3,000	0	0	0	$ -	$ -
May-09	2	3,000	0	65,042	64,797	$ (229,714.71)	$ -
Jun-09	1	3,000	0	13,540	13,540	$ (14,606.40)	$ -
Jul-09	1	3,000	0	31,216	31,152	$ (98,817.60)	$ -
Aug-09	1	3,000	0	31,169	31,089	$ (98,817.60)	$ -
Sep-09	1	3,000	0	32,767	32,091	$ (104,692.80)	$ -
Oct-09	1	3,000	0	32,588	32,588	$ (103,713.60)	$ -

Louisville Gas and Electric Company

Case No. 2009-00549

Curtailment Service Rider 1 (CSR1) - Primary

For the Test Year Ending October 31, 2009

Start Date	Start Time	End Date	End Time	Duration in Hours	Estimated MW Curtailment
1/15/2009	7:00:00 AM	1/15/2009	9:00:00 PM	14.0	30.0
1/16/2009	7:00:00 AM	1/16/2009	9:00:00 PM	14.0	30.0
6/2/2009	1:00:00 PM	6/2/2009	5:00:00 PM	4.0	20.0
6/17/2009	1:00:00 PM	6/17/2009	5:00:00 PM	4.0	29.0
6/23/2009	1:00:00 PM	6/23/2009	5:20:00 PM	4.3	28.0
6/24/2009	1:00:00 PM	6/24/2009	6:00:00 PM	5.0	
6/25/2006	1:00:00 PM	6/25/2009	6:00:00 PM	5.0	28.0
8/10/2009	1:00:00 PM	8/10/2009	2:00:00 PM	1.0	30.0
8/10/2009	2:00:00 PM	8/10/2009	3:00:00 PM	1.0	
8/11/2009	11:00:00 AM	8/11/2009	1:30:00 PM	2.5	30.0
8/11/2009	1:30:00 PM	8/11/2009	4:30:00 PM	3.0	
8/12/2009	11:00:00 AM	8/12/2009	5:00:00 PM	6.0	30.0
8/13/2009	1:00:00 PM	8/13/2009	2:00:00 PM	1.0	30.0
8/13/2009	2:00:00 PM	8/13/2009	5:00:00 PM	3.0	30.0
8/17/2009	10:00:00 AM	8/17/2009	11:00:00 AM	1.0	
8/17/2009	11:00:00 AM	8/17/2009	6:00:00 PM	7.0	1.0
8/26/2009	1:00:00 PM	8/26/2009	2:00:00 PM	1.0	
8/26/2009	2:00:00 PM	8/26/2009	6:00:00 PM	4.0	30.0
8/27/2009	11:00:00 AM	8/27/2009	6:00:00 PM	7.0	30.0

Louisville Gas and Electric Company

Case No. 2009-00549

Curtailment Service Rider 1 (CSR1) - Transmisison

For the Test Year Ending October 31, 2009

Start Date	Start Time	End Date	End Time	Duration in Hours	Estimated MW Curtailment
6/2/2009	1:00:00 PM	6/2/2009	5:00:00 PM	4.0	
8/27/2009	11:00:00 AM	8/27/2009	6:00:00 PM	7.0	18.0

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Attorney General's Initial Requests for Information
Dated March 1, 2010

Question No. 237

Responding Witness: Robert M. Conroy/William Steven Seelye

Q-237. With regard to LG&E's current Curtailment Service Rider 2 ("CSR2"), please provide the following amounts by rate schedule, separated between Primary and Transmission, for each month of the test year:

(a) number of customers;

(b) total firm contract demand;

(c) total contract curtailment load;

(d) total billing demand;

(e) total demand credits;

(f) total non-compliance charges by month; and,

(g) listing of date, time, duration, and estimated MW curtailment.

Please provide in hard copy as well as in Microsoft readable electronic format (preferably Microsoft Excel).

A-237. The Company did not have any customers subject to the Curtailable Service Rider 2 within the test year.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Attorney General's Initial Requests for Information
Dated March 1, 2010

Question No. 238

Responding Witness: Robert M. Conroy/William Steven Seelye

Q-238. With regard to LG&E's current Curtailment Service Rider 3 ("CSR3"), please provide the following amounts by rate schedule, separated between Primary and Transmission, for each month of the test year:

(a) number of customers;

(b) total firm contract demand;

(c) total contract curtailment load;

(d) total billing demand;

(e) total demand credits;

(f) total non-compliance charges; and,

(g) listing of date, time, duration, and estimated MW curtailment.

Please provide in hard copy as well as in Microsoft readable electronic format (preferably Microsoft Excel).

A-238. The Company did not have any customers subject to the Curtailable Service Rider 3 within the test year.

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2009-00549

Response to Attorney General's Initial Requests for Information
Dated March 1, 2010

Question No. 239

Responding Witness: William Steven Seelye

Q-239. With regard to LG&E's proposed Curtailable Service Rider ("CSR") referenced at Pages 22-24 of Mr. Seelye's direct testimony, please provide all workpapers, spreadsheets, source documents, assumptions, etc. utilized to develop the CSR provisions (curtailable hours, buy-through rates, etc.) being proposed in this case. Please provide the response in hard copy as well as in Microsoft readable electronic format as applicable (preferably Microsoft Excel).

A-239. There are no workpapers used to develop the CSR provisions.

EXHIBIT DWG-2

CSR CREDIT: CT FIXED-CHARGE METHOD

CSR Credit: CT Fixed-Charge Method

CT Avoided Capital Cost (1)	$730.00	per kW
Levelized Fixed Charge Rate (2)	11.04%	
Annual Fixed Charge	$80.59	per kW
Fixed O&M (3)	$13.00	per kW
Subtotal	$93.59	per kW
Reserve Margin Adjustment (4)	1.14	
Annual Avoided CT Cost	$106.69	per kW

	Transmission	Primary
Annual Avoided CT Cost	$106.69	$106.69
Loss Adjustment (5)	1.0244	1.0442
Loss-Adjusted Avoided CT Cost	$109.30	$111.41
Implied Credit ($/kW)	$9.11	$9.28

Sources:
(1) KU Response to KIUC 1-12.
(2) KU Response to KIUC 1-13.
(3) KU Response to KIUC 1-14.
(4) KU/LGE 2008 IRP at Vol. 1, 5-34.
(5) Data supplied by KIUC witness Stephen Baron.

EXHIBIT DWG-3

KIUC PROPOSED RIDER CSR10

LOUISVILLE GAS AND ELECTRIC

STANDARD RATE RIDER CSR10 – CURTAILABLE SERVICE RIDER

APPLICABLE

In all territories served.

AVAILABILITY OF SERVICE

This rider shall be available to customers served under applicable power schedules that contract for not less than 1,000 kilowatts individually and up to an aggregate of total curtailable requirements served under a Company curtailable rate option as of June 1, 2010, plus 100 additional megawatts of total requirements subject to curtailment under Riders CSR10 and CSR30 combined, such curtailment to be implemented upon notification by the Company.

CONTRACT OPTION

Customer may, at Customer's option, contract with Company to curtail service upon notification by Company. Requests for curtailment shall not exceed three-hundred and fifty (350) hours per year. No single request for curtailment shall be for less than thirty (30) minutes or for more than fourteen (14) hours per calendar day, with no more than two (2) requests for curtailment per calendar day within these parameters. A curtailment is a continuous event with a start and stop time that may have both physical and buy-through options within the interval between the start and stop time. Company may request or cancel a curtailment at any time during any hour of the year, but shall give no less than ten (10) minutes notice when either requesting or canceling a curtailment. At the time of issuing a curtailment request, Company will give customer a good-faith estimate regarding the expected duration of the curtailment, and the likelihood of requiring both physical and buy-through options during the curtailment.

Company may request at its sole discretion up to 100 hours of physical curtailment per year during a system emergency without a buy-through option. For purposes of this rider, a system emergency is defined as an event in which continued service by the Company to Rider CSR10 customers would threaten reliability of service to the Company's firm service retail customers.

Company may also request at its sole discretion up to 250 hours of curtailment per year with a buy-through option, whereby Customer may choose either to curtail service in accordance with this Rider or to purchase its curtailable requirements by paying the Automatic Buy-Through Price, as set forth below, for all kilowatt hours of curtailable requirements.

LOUISVILLE GAS AND ELECTRIC

STANDARD RATE RIDER CSR10 – CURTAILABLE SERVICE RIDER

Curtailable Load and compliance with a request for curtailment shall be measured in one of the following ways:

Option A. Customer may contract for a given amount of firm demand measured on a 15-minute demand basis. During a request for physical curtailment, Customer shall reduce demand to the firm demand designated in the Customer's contract. During a curtailment request with a buy-through option, the Automatic Buy-Through Price, as applicable, shall apply to the Customer's total kilowatt-hour usage during the Curtailment, less the product of the Customer's firm contract demand times the number of hours in the curtailment. The Customer's maximum 15-minute measured demand in excess of firm load during each requested physical curtailment shall equal the Customer's Noncompliance Demand.

Option B. Customer may contract for a given amount of Designated Curtailable Load. A customer electing this option agrees to reduce its demand during a physical curtailment (no buy-through option available) called by the Company to a level equal to the maximum 15-minute demand immediately prior to the physical curtailment, less the Customer's Designated Curtailable Load. During a curtailment with a buy-through option, the Automatic Buy-Through Price shall apply to the Designated Curtailable Load times the number of hours in the curtailment. The Customer's Noncompliance Demand for each requested physical curtailment shall equal the positive value determined by first subtracting Customer's Designated Curtailable Load from the Customer's maximum 15-minute demand immediately preceding the curtailment, and then subtracting this difference from the Customer's maximum demand during the curtailment.

RATE

The following monthly billing credits and charge will be applicable.

Transmission Voltage Service	$ 5.40 per kW Curtailable Billing Demand
Primary Voltage Service	$ 5.50 per kW Curtailable Billing Demand
Noncompliance Charge	$16.00 per kW Noncompliance Demand.

LOUISVILLE GAS AND ELECTRIC

STANDARD RATE RIDER CSR10 – CURTAILABLE SERVICE RIDER

RATE (CONTINUED)

A Customer's failure to comply with a curtailment request may result in termination of service under this rider. Customer will be charged for each kilowatt of Noncompliance Demand.

A customer may avoid Noncompliance Charges if the Customer arranges, at its expense, to install and pay for the maintenance of all equipments necessary to cede mechanical control of the Customer's connected Curtailable Load to the Company.

CURTAILABLE BILLING DEMAND

Curtailable Billing Demand (CBD) A shall be determined as follows for a customer served under Option A or Option B.

Option A. CBD shall be the difference between the Customer's maximum measured 15-minute demand during the billing period and the Customer's firm contract demand. CBD measurements are limited to the hours of 10:00 A.M.-10:00 P.M., Monday-Friday during May-September, and 6:00 A.M.-10:00 P.M., Monday-Friday during October-April.

Option B. CBD shall be the Customer's Designated Curtailable Load.

AUTOMATIC BUY-THROUGH PRICE

The Automatic Buy-Through Price (ABTP) per kWh shall be determined daily in accordance with the following formula:

ABTP = NGP x 0.012000 MMBtu/kWh

NGP is the mid-point price for natural gas ($/MMBtu) posted for the day in *Gas Daily* for Dominion-South Point, and will be used for the electrical day from 12 midnight to midnight. The posted price for Monday or the day after a holiday shall be considered the posted price for Saturday, Sunday, and the holiday.

CONTRACT TERM

The minimum original contract period shall be one (1) year, renewable annually until terminated by giving at least six (6) months prior written notice. Company may require a longer term contract if in the Company's sole

discretion, a longer term is necessary due to the size of the Customer's load or other relevant conditions.

TERMS AND CONDITIONS

Except as specified above, all other provisions of the power rate to which this schedule is a rider shall apply.

EXHIBIT DWG-4

KIUC PROPOSED RIDER CSR30

LOUISVILLE GAS AND ELECTRIC

STANDARD RATE RIDER CSR30 – CURTAILABLE SERVICE RIDER

APPLICABLE

In all territories served.

AVAILABILITY OF SERVICE

This rider shall be available to customers served under applicable power schedules that contract for not less than 1,000 kilowatts individually and up to an aggregate of total curtailable requirements served under a Company curtailable rate option as of June 1, 2010, plus 100 additional megawatts of total requirements subject to curtailment under Riders CSR10 and CSR30 combined, such curtailment to be implemented upon notification by the Company.

CONTRACT OPTION

Customer may, at Customer's option, contract with Company to curtail service upon notification by Company. Requests for curtailment shall not exceed three-hundred and fifty (350) hours per year. No single request for curtailment shall be for less than thirty (30) minutes or for more than fourteen (14) hours per calendar day, with no more than two (2) requests for curtailment per calendar day within these parameters. A curtailment is a continuous event with a start and stop time that may have both physical and buy-through options within the interval between the start and stop time. Company may request or cancel a curtailment at any time during any hour of the year, but shall give no less than thirty (30) minutes notice when either requesting or canceling a curtailment. At the time of issuing a curtailment request, Company will give customer a good-faith estimate regarding the expected duration of the curtailment, and the likelihood of requiring both physical and buy-through options during the curtailment.

Company may request at its sole discretion up to 100 hours of physical curtailment per year during a system emergency without a buy-through option. For purposes of this rider, a system emergency is defined as an event in which continued service by the Company to Rider CSR10 customers would threaten reliability of service to the Company's firm service retail customers.

Company may also request at its sole discretion up to 250 hours of curtailment per year with a buy-through option, whereby Customer may choose either to curtail service in accordance with this Rider or to purchase its curtailable requirements by paying the Automatic Buy-Through Price, as set forth below, for all kilowatt hours of curtailable requirements.

LOUISVILLE GAS AND ELECTRIC

STANDARD RATE RIDER CSR30 – CURTAILABLE SERVICE RIDER

Curtailable Load and compliance with a request for curtailment shall be measured in one of the following ways:

Option A. Customer may contract for a given amount of firm demand measured on a 15-minute demand basis. During a request for physical curtailment, Customer shall reduce demand to the firm demand designated in the Customer's contract. During a curtailment request with a buy-through option, the Automatic Buy-Through Price, as applicable, shall apply to the Customer's total kilowatt-hour usage during the Curtailment, less the product of the Customer's firm contract demand times the number of hours in the curtailment. The Customer's maximum 15-minute measured demand in excess of firm load during each requested physical curtailment shall equal the Customer's Noncompliance Demand.

Option B. Customer may contract for a given amount of Designated Curtailable Load. A customer electing this option agrees to reduce its demand during a physical curtailment (no buy-through option available) called by the Company to a level equal to the maximum 15-minute demand immediately prior to the physical curtailment, less the Customer's Designated Curtailable Load. During a curtailment with a buy-through option, the Automatic Buy-Through Price shall apply to the Designated Curtailable Load times the number of hours in the curtailment. The Customer's Noncompliance Demand for each requested physical curtailment shall equal the positive value determined by first subtracting Customer's Designated Curtailable Load from the Customer's maximum 15-minute demand immediately preceding the curtailment, and then subtracting this difference from the Customer's maximum demand during the curtailment.

RATE

The following monthly billing credits and charge will be applicable.

Transmission Voltage Service	$ 5.20 per kW Curtailable Billing Demand
Primary Voltage Service	$ 5.30 per kW Curtailable Billing Demand
Noncompliance Charge	$16.00 per kW Noncompliance Demand.

LOUISVILLE GAS AND ELECTRIC

STANDARD RATE RIDER CSR30 – CURTAILABLE SERVICE RIDER

RATE (CONTINUED)

A Customer's failure to comply with a curtailment request may result in termination of service under this rider. Customer will be charged for each kilowatt of Noncompliance Demand.

A customer may avoid Noncompliance Charges if the Customer arranges, at its expense, to install and pay for the maintenance of all equipments necessary to cede mechanical control of the Customer's connected Curtailable Load to the Company.

CURTAILABLE BILLING DEMAND

Curtailable Billing Demand (CBD) A shall be determined as follows for a customer served under Option A or Option B.

Option A. CBD shall be the difference between the Customer's maximum measured 15-minute demand during the billing period and the Customer's firm contract demand. CBD measurements are limited to the hours of 10:00 A.M.-10:00 P.M., Monday-Friday during May-September, and 6:00 A.M.-10:00 P.M., Monday-Friday during October-April.

Option B. CBD shall be the Customer's Designated Curtailable Load.

AUTOMATIC BUY-THROUGH PRICE

The Automatic Buy-Through Price (ABTP) per kWh shall be determined daily in accordance with the following formula:

ABTP = NGP x 0.012000 MMBtu/kWh

NGP is the mid-point price for natural gas ($/MMBtu) posted for the day in *Gas Daily* for Dominion-South Point, and will be used for the electrical day from 12 midnight to midnight. The posted price for Monday or the day after a holiday shall be considered the posted price for Saturday, Sunday, and the holiday.

CONTRACT TERM

The minimum original contract period shall be one (1) year, renewable annually until terminated by giving at least six (6) months prior written notice. Company may require a longer term contract if in the Company's sole

discretion, a longer term is necessary due to the size of the Customer's load or other relevant conditions.

TERMS AND CONDITIONS

Except as specified above, all other provisions of the power rate to which this schedule is a rider shall apply.

EXHIBIT DWG-5

KEY DIFFERENCES: LG&E AND KIUC CURTAILABLE RATE PROPOSALS

Key Differences: LG&E and KIUC Curtailable Rate Proposals

	Element	LG&E CSR	KIUC CSR10	KIUC CSR30
1.	Availability (total MW)	200	**	**
2.	Notice (minutes)	10	10	30
3.	Curtailment Hours			
	Physical	100	100	100
	Buy-Through	400	250	350
4.	Buy-Through kWh			
	Option A	(Max kW during curtailment - firm kW) x curtailment hrs.	Total kWh during curtailment - (firm kW x curtailment hrs)	Total kWh during curtailment - (firm kW x curtailment hrs)
	Option B	Designated Curtailable Load x curtailment hrs.	Same	Same
5.	Curtailment Credit			
	Primary ($/kW)	$5.20	$5.50	$5.30
	Transmission ($/kW)	$5.10	$5.30	$5.20

** Aggregate of total curtailable load served under Riders CSR1 and CSR3 as of June 1, 2010, plus an additional 100 MW of curtailable load served under Riders CSR10 and CSR30 combined.